

10.03
47
83

ATHLETIC JOURNAL

THE LIBRARY OF THE

JUN 13 1951

UNIVERSITY OF ILLINOIS

Vol. XXXI, No. 10

June, 1951



**SINGLE
WING
AT
MICHIGAN
STATE**

A Name that's Great in Tennis Too!

Rawlings

TENNIS BALLS and RACKETS



○ In tennis too — the name Rawlings on equipment is your assurance of championship equipment for championship play.

It takes plenty of "know-how" to build a Rawlings Ply-Weld Bow Racket with that perfect feel and balance for precision control. Rawlings Ply-Weld Bow Rackets give you maximum power and greater speed — they're made stronger at every vital point for hard, fast, championship tennis.

You'll find the same perfection in Rawlings RMC Tennis Balls. Even one game will prove there's nothing to match them in liveliness, accuracy and speed. And you'll find they stand up longer on the roughest hard-surfaced courts because of the extra long, extra-thick wool nap.

*At Your
Rawlings Dealer*



PLUS MARKING
All RMC Balls are "Plus Marked"
For Ready Identification



For maximum strength, perfect balance
and controlled resiliency.



RAWLINGS MANUFACTURING CO.

"The Finest In The Field"
ST. LOUIS 3, MO.

COACHES—
TO GET THE MOST OUT OF
Two Great Games

— play the Soccer and Volley Balls from the official source of America's finest sports equipment. Champions in performance — they take all the punishment your teams can give them.



Top-rated Twins of Volley Ball

Choice white leather 12-panel cover. Easy on the hands. Keeps size, shape and weight throughout long playing life. Approved for tournament play by the U. S. Volleyball Association.

The Spalding Laceless Volley Ball — official for the U. S. Volleyball championships.



The Super Twins of Soccer

English type top-grade tanned cowhide. 18-panel models in official size, shape and weight. Flawless lock-stitched, and triple lined, they take a powerful lot of hooting.

Made by



SPALDING



SETS THE PACE IN SPORTS

Published by
THE ATHLETIC JOURNAL PUBLISHING CO.
 6858 Glenwood Avenue
 Chicago 26, Illinois

MAJOR JOHN L. GRIFFITH
 Founder

JOHN L. GRIFFITH
 Publisher and Editor

M. M. ARNS
 Associate Editor

BILL GLASER
 Art Editor

INFORMATION EDITORS

1950-1951

FOOTBALL

Charles "Bud" Wilkinson, University of Oklahoma
 Jeff West, Cairo, Georgia, High School

SIX-MAN FOOTBALL

M. L. Rafferty, Jr., Big Bear Lake, Cal.
 High School

BASKETBALL

Howard Hobson, Yale University
 John A. Grayson, Springfield, Missouri
 High School

BASEBALL

Dan Jesse, Trinity College
 James Smilgoff, Taft High School, Chicago

TRACK

Clyde Littlefield, University of Texas

SWIMMING

Richard O. Papenguth, Purdue University

WRESTLING

Art Griffith, Oklahoma A. & M. College

BOXING

John J. Walsh, University of Wisconsin

TENNIS

Gardnar Mulloy, University of Miami

GOLF

Les Bolstad, University of Minnesota

HOCKEY

Westcott E. S. Moulton, Brown University

SOCCER

George D. Ritchie, Wethersfield, Connecticut
 High School

GYMNASTICS

Newton C. Loken, University of Michigan

PHYSICAL EDUCATION

William L. Hughes, Temple University

FENCING

Irving De Koff, Columbia University



Eastern Advertising Representative:
 Charles Thorp, 370 Lexington Avenue,
 New York City

Published monthly except July and August by the Athletic Journal Publishing Company, 6858 Glenwood Avenue, Chicago, Illinois. Member Audit Bureau of Circulation. Request for change of address must reach us thirty days before the date of issue with which it is to take effect. Duplicate copies cannot be sent to replace those undelivered through failure to send advance notice.

Subscription Prices: \$2.00 per year; \$3.00 for two years; \$3.75 for three years; \$1.20 for six months; \$1.00 for five months; Canada \$2.50 per year; foreign \$2.75 per year. Single copies 25 cents for current volume, 35 cents per copy for back volumes. Copyright 1951, The Athletic Journal Publishing Company. Entered as second-class matter, August 14, 1925 at the post office at Chicago, Illinois under the Act of March 3, 1879; additional entry at Rochelle, Illinois.

The ATHLETIC JOURNAL

Nation-Wide Amateur Athletics

Volume XXXI

Number 10

JUNE, 1951

7 FOOTBALL ARTICLES

SINGLE WING AT MICHIGAN STATE

THE OVERALL OFFENSE 5
C. L. "Biggie" Munn

OFFENSIVE LINE PLAY 8
Hugh D. Daugherty

BALL-HANDLING FOR THE BACKFIELD 12
L. P. "Red" Dawson

OFFENSIVE END PLAY 13
Earl L. Edwards

PLAN YOUR FOOTBALL PRACTICE 16
George A. Katchmer

THE COACH WRITES HOME TO COLLEGE 20
Richard W. Guyer

FUNDAMENTAL DRILLS FOR TEACHING
 FOOTBALL FUNDAMENTALS 28
Forrest W. England

1 ARTICLE ON FACILITIES

ALAMO STADIUM-GYMNASIUM 25
Claud H. Kellam

1 ARTICLE ON TRAINING

INJURIES TO THE NECK 34
J. Blaine Rideout

5 FEATURES

FROM HERE AND THERE 4
 NEW BOOKS 36
 EDITORIALS 51
 BUYERS GUIDE 51
 INDEX TO VOLUME 31 53

FRONT COVER ILLUSTRATION

Continuing our feature coverage of major offenses, we present the Michigan State Single Wing in this issue. All-American end and captain of the Spartans, Bob Carey is pictured on the cover. Carey is the greatest all-round athlete in Michigan State history. He is a first string center on the basketball team and holds the college shot put record of 58'3 3/8".

if you want fewer injuries

equip your squad with the **ONLY** football shoes
that are scientifically designed to eliminate
the **BASIC CAUSES** of foot and leg troubles...

BROOKS

Natural Bend

COPYRIGHT—PATENTED
SPRING STEEL ARCH SUPPORT
FOOTBALL SHOES



The patented construction features of "Natural Bend" shoes protect against strained leg muscles, weakened arches and other disabilities that contribute to injuries sustained in running or pivoting. "Natural Bend" football shoes have built-in spring steel arch supports... flex at the natural bend of the foot... and have these additional safety or comfort features...

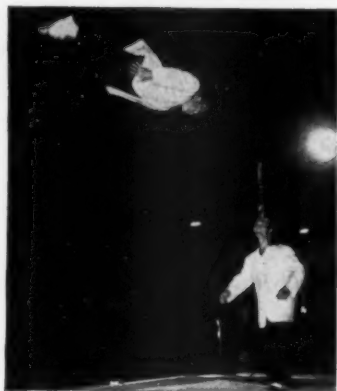


- ★ HIGH CUT UPPERS FOR ANKLE SUPPORT
- ★ MOULDED SOLE PLATES AND COUNTERS
- ★ PATENTED LOCK-TITE CLEAT ASSEMBLIES
(THE BOLTS ARE REPLACEABLE . . . THEY CANNOT BACK UP)

Write today for the special School and College Catalog that gives full details on "Natural Bend" shoes and the other famous, high-quality BROOKS shoes available through your sporting goods dealer.

BROOKS
SHOE MANUFACTURING CO.
Makers of the Finest in Athletic Footwear
58TH & MARKET STREETS, PHILADELPHIA 39, PA.

Action Appeal!



N-I-S-S-E-N TRAMPOLINE*

of Champions

SPORT-TRAINING
AUDIENCE APPEAL
PHYSICAL EDUCATION

Nissen Made and Pioneered America's FIRST STANDARD TRAMPOLINE. Twelve years of Proved Performance.

Write for Free Literature on
MODEL 549-T

"A Flashfold Model"

PARTS —●— ACCESSORIES



for TRAMPOLINE*

An aerated woven-web bed. Fits any model. Perfected by Nissen in 8 years of tests and actual use. Hand-woven of 2-in. nylon parachute webbing. Multi-stitched for maximum strength. Durable special metal fittings attached for securing to either springs or rubber cord (exerciser cable). Meets collegiate regulations. Write for FREE LITERATURE.

NISSEN TRAMPOLINE

Name TRAMPOLINE Reg. U. S. Pat. Office
200 A Ave NW Cedar Rapids, Iowa

from here and there



JOHNNY MAUER, who recently resigned as head basketball and plebe football coach at West Point, to assume a position on the coaching staff at the University of Florida, has had a long and highly successful coaching career. After playing in the same backfield with "Red" Grange, Mauer coached one year at Batavia, Illinois, High School, before going to Kentucky as head basketball and assistant football coach. After three years at Lexington, he put in eight at Miami of Ohio with the same duties. The football duties, however, were with the ends. This was followed by eight years at Tennessee in the dual capacity of football and basketball coach, and finally four at West Point. This comprises a total of nineteen years of dual coaching at major institutions. . . . This year, in addition to being anniversary year for professional baseball, marks also the fifty-fifth anniversary of the invention of volleyball. The game was invented at the Lockport, New York, Y.M.C.A. by William G. Morgan. . . . Other track facilities may lay claim to the fastest track, the best vaulting runways, etc., but when it comes to high jumping they must all take a back seat to the pit given such loving care by Clyde Littlefield at Texas. At least recent records would seem to indicate such to be the fact. Four of the five highest jumps in the world during the past thirteen months were made in the Longhorns Memorial Stadium. A. & M.'s Buddy Davis jumped 6-9 in the recent Texas Relays, while Jack Razzetto of San Diego State and Virgil Severns of Kansas State went 6-8 1/4 a year ago in the Relays. In the 1950 Southwestern Conference Meet, Bob Walters of the host school jumped 6-8 5/8.

TWENTY-FIVE years ago Gaylord won the Minnesota basketball tournament, nothing unique about that except it was the only time that they ever reached the finals, thereby batting a cool 1000 per cent. The eight finalists in this year's tournament had a combined total of 142

wins against 16 losses in pre-tournament play. This is almost a winning percentage of 900 which should answer some of the criticism that the best teams don't get in the finals. . . . "Dino" Martin, whose De La Salle basketball team of Newport, Rhode Island, won the state championship in 1950, as well as the Eastern States Catholic Tourney that year, and who were runners-up in the state tournament this year, has resigned to become a tennis pro at an Eastern tennis club. . . . Harry Lehmann, for five years at Plymouth, New Hampshire, and author of an article in last September's issue, will be the new head football coach at Laconia, New Hampshire, starting next fall. . . . To fill in the gap caused by the two-year track stoppage in New York City's public high school athletic program, the Metropolitan AAU, the City Park Department, and the Co-ordinating Councils of the Police Department will unite to provide a program for the school boys. The AAU will furnish paid coaches, the Park Department will provide track facilities and the Police Co-ordinating Councils have arranged a series of eight fortnightly meets.

THIS year's award for the most improved basketball team went to Clarion State Teachers College. The award, based on the Dick Dunkel ratings, is given annually by the United States Rubber Company and was presented by Frank Leahy, who in addition to his Notre Dame duties, serves as director of the Keds Sports Department. This year Clarion improved their rating from 619th to 240th. . . . The Southern Conference walked away with all the honors when four of their member schools placed in the top ten of the NCAA field goal percentage leaders. What is more, Maryland, Virginia Tech and Washington and Lee were one, two, three, with William and Mary in the tenth spot. Oklahoma made the best showing, finishing ninth in the field goal standings, third in the free throw

(Continued on page 42)

THE ATHLETIC JOURNAL

C
1932
hono
recen
Chris
can
he as
years
"Big
brigh
year
at Sy
1945
Fritz
return
as h
Michi
won

THE
can
an out
undefe
Bowl, M
and Mi
All of
the sing
For t
has bee
we belie
sent tim
or the t
side of
run sin
Also, it
teams a
ing in t



for JUN

SINGLE WING AT MICHIGAN STATE

CLARENCE L. "BIGGIE" MUNN graduated from Minnesota in 1932 where he won All-American honors in 1930 and 1931, and recently was awarded a spot on the Christy Walsh 25-year All-American team. Following graduation, he assisted Bernie Bierman for three years. During 1935 and 1936 "Biggie" was head coach at All-bright College and the following year line coach for Ossie Solem at Syracuse. From 1938 through 1945 he was line coach under Fritz Crisler at Michigan before returning to Syracuse for one year as head coach. "Biggie" went to Michigan State in 1947 and has won 19, tied 2 and lost but 7.

The Overall Offense

By

C. L. "BIGGIE" MUNN

Head Football Coach
Michigan State College

At Michigan State we have tried to combine the T and single wingback formations and in the past four years have averaged 28 points to the opponent's 12, while playing a good representative schedule each year. In this article, we are going to point out what we think are some of the advantages of the single wing.

The trend in football has been to specialize — having offenses, defenses, kicking teams, try-for-point teams, special place kickers and field goal kickers. We also try to specialize from an offensive standpoint. For example, one of the chief requirements of an offensive lineman must be that he has speed. In others words, we are using four good, fast guards instead of two guards and two tackles. We demand, if possible, that our linemen keep pace with our backs and that size is not necessarily an important factor. It helps to have size, but it is not anywhere near as necessary as speed. Football is getting to be more and more a game of movement.

Our quarterback must: 1. Be able to call signals. 2. Be able to block. 3. He must be an adequate passer.

In our system, we often use the buck lateral passing series. The tailback should be able to run and pass. An ideal combination was a man like Everett Grandelius, who made All-American last year. He was a great runner and could pass on occasions. Those occasions were when the opponents least expected it.

The fullback, under our single wing system, should be a good ball-handler and should be able to spin and fake well. Our fullback, Captain Crane of last year, was one of the

(Continued on page 42)



THE single wing ended the 1951 campaign in football by having an outstanding year. Princeton went undefeated, Clemson won the Orange Bowl, Michigan won the Rose Bowl and Michigan State had an 8-1 record. All of these schools are exponents of the single wing.

For the past few years, the trend has been toward the T formation, but we believe that the trend at the present time is back to the single wing, or the teams are using the wing outside of the end, making it possible to run single wing plays from the T. Also, it is our belief that more T teams are going to single wing blocking in the line.



(Series A) THE SHIFT

B1

PHOTOGRAPH BY JEFFREY HARRIS

B2

3

B5

B6

7

B9

B10

1



(Series B) OFF TACKLE SPINNER

C1

C2

C5

C6

C9

C10



(Series C) FULLBACK KEEP



SINGLE WING AT MICHIGAN STATE

Offensive Line Play

By HUGH D. DAUGHERTY
Line Coach, Michigan State College

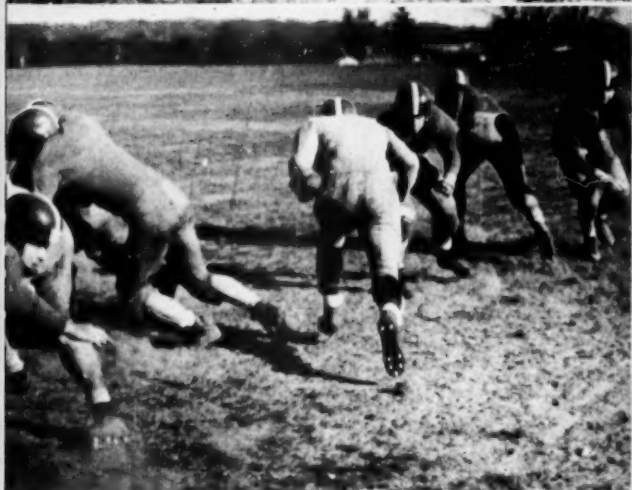
OFFENSIVELY at Michigan State we use a combination of the T and single wing. It is necessary, therefore, in teaching the techniques of line play essential in our system to start with the basic fundamentals that will fit both types of the offense we use.

In offensive line play, everything naturally starts with the stance. We give our players considerable leeway in the type of stance they may use. No two will use exactly the same stance. In other words, we permit them to use a square stance with their

feet on the same plane, or to use a slight drag leg stance with one leg back of the other. We do, however, require them to follow certain fundamentals in arriving at an offensive stance. Their tails should be up with their backs on a plane so that they may move out in any direction. Linemen are asked to use a stance with the width approximately the same as their shoulders. They have little or no weight on their hand and must be able to move equally well forward or to the left or right. Next, we teach the linemen the method we want used in pulling. This is an important part of our line play, since each of our linemen will pull on various plays. In pulling, we always have the lineman step out with the foot in the



(Series D) GUARD PULLING FOR TRAP



direction he is going using the step-out method of pulling rather than the cross-over method. We want our lineman to get his depth on the first step to enable him to clear the next offensive lineman. He pushes himself off his hand and shifts his entire weight on the foot he is stepping out with. The course he will take will depend on the technique he is trying to execute, whether he is pulling to round the horn, or downfield blocking, or whether he is pulling to execute an inside out block (commonly referred to as a trap block), or whether he is pulling for pass protection. We like our linemen to run low with a good wide base so that they will always be in a blocking position and will be able to block any defensive man who unexpectedly crosses their path.

Lead Post Block

Whether we are running from a T or single wing, we use a shoulder block almost exclusively. In our offense we do a great deal of double

HUGH "DUFF" DAUGHERTY learned his football under "Biggie" Munn when the latter coached the line at Syracuse. "Duff" captained the Orange in 1939 and then coached Trinity Prep in New York City. Following five years in service, where he attained the rank of major, he joined "Biggie" at Syracuse and moved with him to Michigan State in 1947.

teaming or tandem blocking. Our most successful technique is what we call a lead post block. The post blocker has two functions: First, he should break the charge of the defensive man. Second, he should keep the seam closed between himself and his lead blocker. He does this by taking a short step toward his lead blocker with the foot nearest the lead blocker. He does not charge out at the defensive man. The lead blocker steps or shoots, depending on the type of block used, over the shoulder of his

post blocker, aiming where the defensive man will be and not where he is before the play starts, attempting to hit the defensive man at the upper thighs or the waist with the full breadth of his shoulder. He immediately starts driving up through the defensive man's chest, bringing his outside leg up and around to prevent the defensive man from sliding into the path of the ball-carrier. In other words, we prefer to take the defensive man laterally rather than to take him straight back.

Inside Out Block

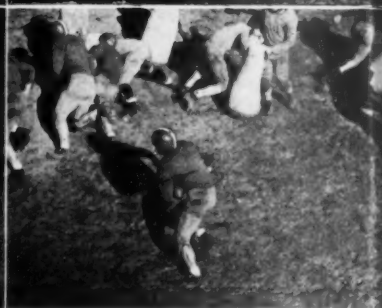
Invariably when we are using a lead post block coming from one direction, we will have an inside-out blocker coming from the opposite direction. This is commonly referred to as a mousetrap, however, in present-day football where the defensive linemen are not penetrating all of the time it becomes increasingly difficult to trap them. We, therefore, teach our linemen to execute an inside out

(Continued on following page)





(Series E) BACKFIELD MANEUVERS FOR A REVERSE



block by pulling and stepping with the foot in the direction they are going. They get their depth on the first step, start right up into the hole on the next step, get inside position on the man and hit him at the upper thighs or the waist with a hard shoulder block, bring the forearm in as a hook as additional blocking sur-

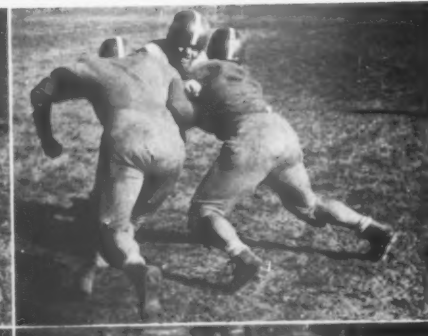
face, drive up through the defensive man's chest bring the outside leg around to prevent the man from sliding into the path of the ball player. In other words, we are trying to block from the inside out. We are going to assume that he is not going to charge as the waiting lineman is the tough

(Continued on page 43)



(Series F) LEAD POST BLOCK





SINGLE WING AT MICHIGAN STATE

CONCERNING ball-handling techniques that we use at Michigan State, we might say we have three distinct methods depending on the formation and the type of plays used from those formations.

The first that we might mention is the one whereby a fullback or a halfback in the single wing gives to another back working parallel to the line of scrimmage. In this type of exchange we place most of the responsi-

Ball-Handling for the Backfield

By **LOWELL P. "RED" DAWSON**
Backfield Coach, Michigan State College

bility on the man who is giving the ball away. We insist that the man giving the ball keep his eyes on the target as much as possible and that he place the ball with the long axis along the belt line, making sure he places it there firmly but does not slam it. The man receiving the ball does not reach for it or keep his eyes

on the ball, but merely builds a shelf below the belt line with his palms upward. The palms of his hands should be held within three or four inches of the waist line so that the ball does not slip down behind his hands. We want the target steady and avoid reaching. From here he tucks the back point of it and the hand over the front point.

Another type of ball exchange is the one used on the buck lateral series, whereby the fullback moves forward and gives it to the blocking back, who pivots in his position. This technique was originally started at Tulane University by Coach Bierman in the late twenties and later on used successfully at Michigan and Princeton. On this type of exchange, we have a quarterback pivot in his tracks or to the proper pivot point, cupping his hands directly above his right knee or the side which the fullback passes on. The palms of his hands are facing each other with room for the ball to slide in and the heels of the hands are used as a backstop about two and a half

(Continued on page 42)

LOWELL "RED" DAWSON quarterbacked the "Green Wave" for three years, graduating in 1932. He coached the backfield for Bernie Bierman, returning as head coach at his alma mater in 1936. His 1939 team went through the season undefeated, dropping a thriller to Texas A. & M. in the Sugar Bowl. From 1942 through 1945 "Red" was back at Minnesota as an assistant to Dr. George Hauser and from 1946 to 1949 he coached the Buffalo Bills in the pro league. He took over the backs at Michigan State last fall.



(Series G) HAND-OFF



SINGLE WING AT MICHIGAN STATE

Offensive End Play

By EARL L. EDWARDS

End Coach, Michigan State College

want our end to hit hard and quick with his feet up under him, even on a lunge. He should attempt to cover the opponent well, with his ear tight against the side of the opponent and with the forearm coming up hard in a shock, making the broad shoulder. We try to get our shoulder under the opponent's shoulder, then it is important to maintain contact and to drive up on the opponent. The ends are urged continually to hit and lift. In order to get under the opponent's shoulder, it is sometimes necessary to duck as we charge, but we try to make sure that it is a shoulder duck and never the head.

In a single wing spin type offense, we are anxious to prevent penetration by defensive linemen, and because of this do not use an open and shut block. When our end is called upon to execute a block alone on an opponent, who is in an outside position, we still use a straight shoulder block. For instance, if a right end must cut off a tackle, who has outside position on a flank play, we step with the outside foot, drive hard with the left shoulder, the head going across the front of the opponent, then

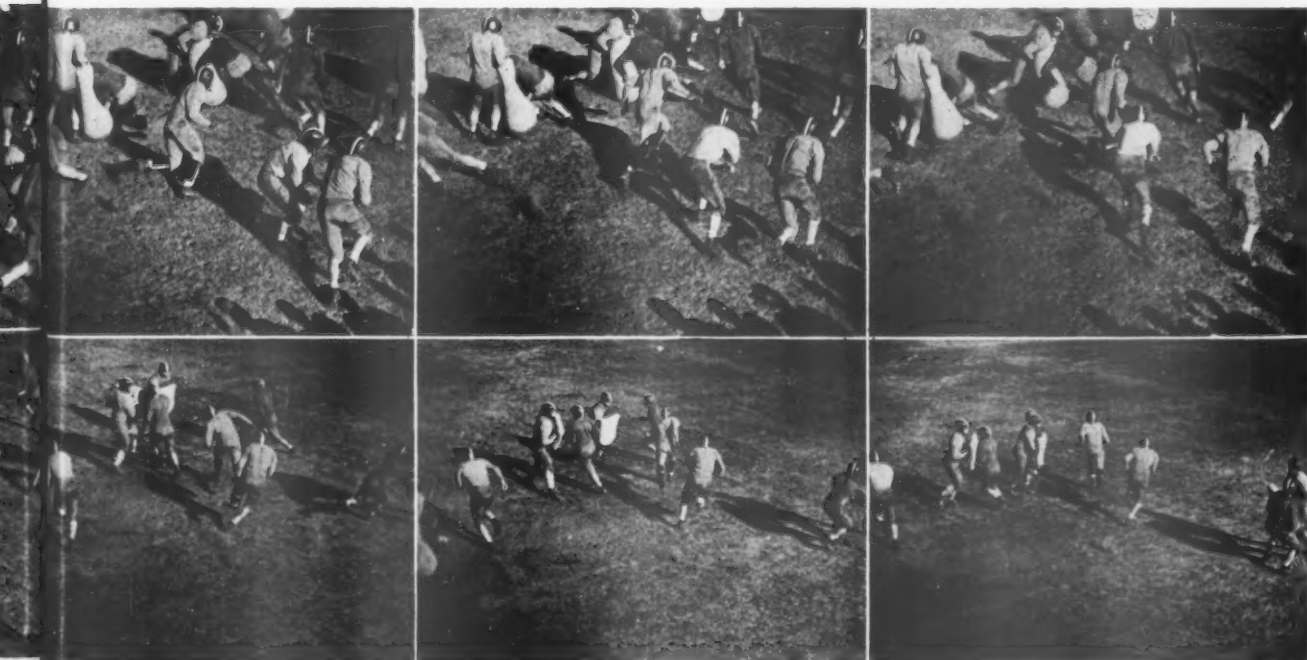
work quickly with the feet to get the outside angle. Here again, as in all of our line blocks, we want to make contact as quickly as possible to prevent penetration.

On the end wing combination, we make the end responsible for hitting first with his straight shoulder block, and are continually urging the end and wingback to keep the seam closed. Series H shows an end and wingback taking a tackle. The first contact is good, but as the sequence develops, the common error in this type of blocking becomes obvious. These boys have allowed an open seam, which forces them to work against each other and allows a strong tackle to split them and get to his defensive point. Closing the seam is easily the most important feature of a successful end-wingback block.

In blocking on linebackers, we are called on to execute either a driving block or a position block. Again we use the straight shoulder unless the linebacker has moved up or is moving toward the line of scrimmage. This would necessitate a reverse body block. If the position block is required, we shoot through fast, turn to meet the expected reaction of our opponent

IN our group work for offensive ends, we divide our time almost equally between blocking and pass receiving. Stance has already been mentioned by Duffy Daugherty. The emphasis is on comfort and balance.

We use the straight shoulder block almost exclusively, considering the knee and crab as simple follow-ups in a determined effort to execute a successful block. Our ends are responsible for keeping the entire offensive line right up to the line of scrimmage. We





EARL EDWARDS graduated from Penn State in 1931 where he competed for three years in varsity ball. He then coached Princeton Prep and Ebensburg, Pennsylvania, High School. Returning to Penn State in 1936 he coached the ends until shifting to Michigan State in 1949. In addition to serving as end coach, Edwards is the ace scout on the Spartan staff.

and block much as we would on pass protection. We always observe the principle of never passing up one linebacker to get to another.

In downfield blocking, the timing becomes the most important factor. It does no good to block a man in the secondary who still has time to get up and make the tackle. Our emphasis is on maintaining balance and the position which will enable our runner to use us as a post.

Passing

The ability of our pass receivers varies greatly and some boys never become very adept at catching the ball. We try to play down the possibility of missing a pass, preferring to encourage the attitude that pass receiving is easy and that to catch passes is a very minor achievement. Emphasis is placed on the attempt to score after receiving.

A few of the principles we observe in our drills are: 1. Decoys must run hard and as soon as the ball is thrown to another receiver, they should turn and come back for the receiver. 2. We do not want our receivers to run curves, favoring rather the sharp angles. 3. We want our faking to be done close to the defensive man. In drills we often run man against man trying to teach and perfect the usual evasive tactics such as the Z and the head and shoulder fake, change-of-pace and hooks.

On hook passes there is a tendency to turn too soon, losing the depth we want. We try to get a hook receiver to return at the proper depth, and to be well balanced in case the pass is not accurate, and upon receiving it to turn and head for the goal

(Continued on page 44)



(Series H)

**END AND WING-
BACK ON TACKLE**





For fine footwork

...with Speed and Ease

For buoyant ease — for split-second stop-and-go — there are no basketball shoes to match these! They combine every feature for fast play and solid comfort: special Spalding cushion sport arch and heel helps prevent fatigue — stimulate foot action.

Available in black or white uppers with non-marking red molded sole and famous non-slipping "S" design tread. White rubber toe strip adds strength and protection. For firm footing — sure shooting — have your team equipped with Spalding "SS" Basketball Shoes.



Spalding

SS Basketball Shoes

with famous non-slipping "S" sole

Plan Your Football Practice

By **GEORGE A. KATCHMER**
Newport, Pennsylvania, Joint High School

IT is a very significant fact that successful football coaches plan every detail of their daily practice sessions. A schedule is made up, either at the beginning of the football season, or daily, covering every step and detail that will be undertaken on the practice field that day. Time, in minutes, is specified for each drill or maneuver, according to its difficulty and importance. Thus, there is little, if any, time wasted during the period allotted for practice. Practice is run off according to the schedule. In this way, the coach is sure he is covering the material and information required. Too often, the coach without a detailed schedule, must overemphasize time on a drill or maneuver because he has no definite plan of action to follow. In addition, it can also be stated that many details will be forgotten and overlooked. Practice cannot be conducted on the spur of the moment with any degree of assured success. Some plan must be followed.

The following three-week schedule of daily practice sessions is presented mainly for those coaches who find themselves in school systems without junior high schools, working unassisted, and handling all beginners alone. These circumstances can be quite a tax on one person's patience and upon the time considered conducive to good practice results.

The coach in a small high school is always working with beginners. They usually make up the majority of his squad. Time, then, is a valuable factor to consider. The material to be presented to these boys must be apportioned carefully to bring about the end results, namely getting the boys ready for the games. This is quite a task for a one-man coaching staff even with a well-planned practice schedule.

Most coaches consider two hours the maximum practice period. This may vary slightly according to the daily situation. To the small school coach, then, a definite practice schedule is highly important not only to conserve his own energy, but also to keep the enthusiasm of his boys at a high tempo.

To assure drawing up the best possible schedule, the coach should, first of all, do considerable thinking about the material which will be available for the coming season. He should jot

down or keep in mind the weaknesses of his boys; those things that they need most such as blocking, tackling, etc. He should make himself cognizant of their good points so that time may be spared on this phase of training and added to the skills which need improvement.

A list of fundamentals should be made. Another list of technical evolutions, such as defense, offense, individual play, formations, etc., should also be jotted down. In other words, the coach should list on paper everything he thinks his boys ought to know, considering all of them as beginners. The coach must plan to start from scratch and then list in coherence, step by step, all phases of the game his boys should learn.

Naturally, the coach who is fortunate enough to have one or more assistants should consult them before making his schedule. He should incorporate as many of their ideas as will fit into his own plans and strategy.

Conferences should be held every day, prior to practice, by the coach and his assistants. Every detail of the practice schedule should be gone over and every instructor should be well versed in his duties for the period to come. The same should hold true immediately after the practice session is over. The coaching staff should hold an after-practice critique in which faults and weaknesses are brought to each one's attention and changes made accordingly in the next day's practice schedule. This would apply to those practice schedules that are prepared before the season starts. If it is prepared daily, then notes should be made on the findings of the critique so that they will be considered in the preparation of the next day's schedule.

The small school coach seldom has too much free time during the day. He usually has a full load of classes, therefore, it is advisable for him to prepare his practice schedule prior to the start of the football season. It will then take but a few minutes to check the schedule daily and make any changes required.

The one-man coaching staff should plan his drills in such a way that all of the boys will be busy even though he will be working with them separately. By this we mean that while the coach is devoting his attention to the backfield, the linemen will have a

mass drill based upon individual tactics, such as practicing pulling out of the line; charging; defensive maneuvers, such as submarining; over; shivering; knifing; sprinters charge; arms and butt charge; free leg charge, etc.

Naturally, the first week or two the coach will have to treat the backs and linemen alike by teaching them practically the same drills since he will have little, if any, idea of the separation of the squad regarding position. This does not hold true, of course, in the larger schools, where junior high school and jayvee squads are part of the program. In the latter case, lower echelons of the system have already done the experimenting and discovering. The coach needs to continue only from conditioning to advanced techniques of coaching.

Because the small school coach has twice the problem of his colleague in a larger school, it is imperative that he adopt a workable plan of practice action. It is also a good idea, whenever practicable, to schedule the opening game at least four weeks after the initial practice session. There is far too much that an inexperienced boy must learn. Thus, more often than not, less than four weeks is insufficient time to prepare the novice for his first game. Even the experienced boy on a squad of this type should get the advantage of four weeks' preparation. The reasons are too numerous to list.

Kicking-off and place-kicking practice, plus punting and passing, can usually be covered before practice starts on any day. Usually the boys are on the field earlier than the coach, prior to practice, due to taping and various other necessary details. Blackboard drills can be held at the discretion of the coach and information sheets can be mimeographed and handed out to the boys whenever the occasion demands. Most coaches have this material ready before the opening practice session starts. Some hand it out in the spring; others during the summer; while still other coaches give it out during the progression of the practice period. Quarterback play can be covered by the coach, at his or the candidates' convenience, through special sessions, information sheets, movies, etc.

Following is an example of the schedule we have used with variations for the past five years. Much of the



It costs no more
to play the best

Specify Wilson

Playground and Camp Equipment

The name "Wilson" on sports equipment is recognized the world over as a mark of finest quality. It is your assurance of the last word in modern design and construction . . . and craftsmanship that is today's highest standard of excellence. No matter what your playground or camp sports needs, you'll know when you specify "Wilson" that you specify the world's most widely accepted sports equipment.

IT'S **Wilson**
TODAY IN SPORTS EQUIPMENT

WILSON SPORTING GOODS CO., CHICAGO
Branch offices in New York, San Francisco
and 26 other principal cities
(A subsidiary of Wilson & Co., Inc.)

first week's work is practically repetition. The schedule may be as elastic as the coach cares to make it.

Three-Week Daily Football Practice Schedule First Week

MONDAY:

- 30 Minutes—Calisthenics, grass drills and rolls.
- 20 Minutes—Windsprints and dashes, linemen and backs alternated.
- 5 Minutes—Recovery of loose ball.
- 15 Minutes—Line and backfield stances.
- 10 Minutes—Technique of charging, followed by windsprints.
- 10 Minutes—Three-man laterals up and down the field.
- 20 Minutes—Orientation on charger-blocker machine or dummy. Every coach should try to have a charger-blocker machine. The money spent is repaid in results and elimination of injuries. This machine helps build confidence.

Finish—One hundred yard dash.

TUESDAY:

- 30 Minutes—Calisthenics and grass drills.
- 20 Minutes—Windsprints and dashes.
- 5 Minutes—Recovery of loose ball.
- 5 Minutes—Line and backfield stances.
- 15 Minutes—Pulling out of the line to lead the interference.
- 10 Minutes—Three-man laterals.
- 15 Minutes—Fundamentals of passing and receiving.

- 20 Minutes—Work on charger-blocker and dummy.
- Finish—One hundred yard dash.

WEDNESDAY:

- 30 Minutes—Calisthenics and grass drills.
- 20 Minutes—Windsprints and dashes.
- 10 Minutes—Huddles and offensive formations.

- 20 Minutes—Three-man laterals and zigzag running between spaced men, in rope course, or rubber tires.

- 5 Minutes—Pulling out of the line to lead interference.

- 15 Minutes—Demonstration and slow practice in the proper techniques of tackling.

- 15 Minutes—Demonstration and slow practice in the techniques of blocking.

- 15 Minutes—Passing and receiving.

- Finish—One hundred yard dash.

THURSDAY:

- 30 Minutes—Calisthenics and grass drills.

- 20 Minutes—Windsprints and dashes.

- 5 Minutes—Huddles and formations, with calling of signals, linemen stances, shifting into position, etc.

- 15 Minutes—Backs punting and receiving, linemen down under punts.

- 10 Minutes—Linemen pulling out to lead interference—backfield men zigzagging and doing spinning drills.

- 15 Minutes—Practice tackling on charger-blocker machine.

- 15 Minutes—Blocking on charger-blocker, shoulder block, cross-body block, etc.

- 10 Minutes—Passing and receiving.

- 10 Minutes—Kick-off practice with proper receiving formation and kicking formation.

- Finish—One hundred yard dash.

FRIDAY:

- 20 Minutes—Calisthenics and grass drills.

- 10 Minutes—Windsprints and dashes.

- 10 Minutes—Huddles and formations—with calling of signals; linemen stances and shifts; backfield stances and shifts. Different offensive formations.

- 10 Minutes—Backs spinning and zigzag running; linemen pulling out of the line.

- 10 Minutes—Backs punting and receiving, linemen down under punts.

- 20 Minutes—Defensive tactics—ten options—

- (1) sprinters charge; (2) shiver; (3) submarine; (4) over; (5) knife; (6) free leg; (7) split (arms and butt); (8) loop; (9) slice through the hole and (10) slant.

- 20 Minutes—Blocking and tackling on dummy and charger-blocker.

- 10 Minutes—Passing and receiving.

- 10 Minutes—Kick-off receiving, formation and blocking—three types—down the middle with or without cross-body blocking, and to the right or left side.

- 20 Minutes—Two-on-one scrimmage.

- Finish—One hundred yard dash.

SATURDAY:

- 10 Minutes—Calisthenics and grass drills.

- 10 Minutes—Windsprints and dashes.

- 10 Minutes—Backs spinning and zigzagging; linemen pulling out.

- 5 Minutes—Loose ball recovery.

- 10 Minutes—Passing and receiving.

- 15 Minutes—Linemen on ten defensive tactics.

- 15 Minutes—Charger-blocker and dummy—

- (1) tackling; (2) shoulder block; (3) head

- push; (4) shiver; (5) cross-body block; (6)

- reverse cross-body block.

- 15 Minutes—Fundamentals of line play—individual, etc.

- 10 Minutes—Stiff arm techniques and five-man scrimmage (one back, one blocker, two tacklers and the center).

- 15 Minutes—Punting, receiving, tackling—two linemen as tacklers.

- 15 Minutes—Two-on-one scrimmage.

- Finish—One hundred yard dash.

Second Week

MONDAY:

- 10 Minutes—Calisthenics and grass drills.

- 10 Minutes—Windsprints and dashes.

- 5 Minutes—Backs spinning and zigzagging; drills, linemen pulling out drills.

FOLLOWING graduation from Lebanon Valley, George Katcher coached at Cherrytree, Pennsylvania, High School. Entering the service in 1941 he served as Director of Physical Training at Ellington Field for two of the five years he was in the army. He returned to Cherrytree for two years, and in 1948 assumed his present duties at Newport.

- 10 Minutes—Backs punting and receiving, linemen charging down under punts.

- 15 Minutes—Backfield ball-handling and offensive practice by the linemen—ten defensive tactics.

- 10 Minutes—Linemen on charger-blocker, backs on dummy.

- 10 Minutes—Linemen on dummy, backs on charger-blocker.

- 10 Minutes—Two-on-one scrimmage.

- 10 Minutes—Tackling practice (five-man drill).

- 20 Minutes—Offensive plays.

- 10 Minutes—Passing and receiving drills, with the ends and backs segregated from the linemen.

- Finish—One hundred yard dash.

TUESDAY:

- 10 Minutes—Calisthenics and grass drills.

- 5 Minutes—Windsprints.

- 10 Minutes—Backs punting and receiving; linemen pulling out and down under;

- kick-off and point after touchdown; practice kicking.

- 15 Minutes—Defensive formations—4, 5, 6, 7,

- 8-man lines; punt defense; straight play;

- slant charges; looping line, etc.

- 10 Minutes—Explanation of pass defense;

- zone and man-to-man.

- 15 Minutes—Backs on dummy, linemen on charger-blocker.

- 15 Minutes—Backs on charger-blocker, linemen on ten tactics drill.

- 10 Minutes—Blocking on each other; open field with blocking apron.

- 10 Minutes—Tackling drill; five-man.

- 10 Minutes—Two-on-one drill.

- 20 Minutes—Offensive plays.

- 10 Minutes—Begin to orient team on first opponent.

- Finish—One hundred yard dash.

WEDNESDAY:

- 10 Minutes—Calisthenics and grass drills.

- 5 Minutes—Windsprints and dashes.

- 10 Minutes—Backs and ends pass drill, linemen pulling out drill.

- 20 Minutes—Pass defense—zone and man-to-man; line play; cross-blocking and harassing; pass protection.

- 10 Minutes—Backfield offensive drill, ball-handling, etc. Ten defensive tactics drill for linemen.

- 10 Minutes—Punting, kick-off, point after touchdown, practice linemen down under punts.

- 15 Minutes—Review of offensive and defensive formations.

- 10 Minutes—Backs on dummy, linemen on charger-blocker.

- 10 Minutes—Linemen on dummy, backs on charger-blocker.

- 30 Minutes—Offensive plays.

- 10 Minutes—Two-on-one drill.

- Finish—One hundred yard dash.

THURSDAY:

- 10 Minutes—Calisthenics and grass drills.

- 5 Minutes—Windsprints and dashes.

- 15 Minutes—Kick-off scrimmage.

- 10 Minutes—Point after touchdown scrimmage.

- 10 Minutes—Punting scrimmage.

- 15 Minutes—Information on first opponent and defensive plans.

- 10 Minutes—Two-on-one drill.

- 30 Minutes—Offensive plays.

- 15 Minutes—Scrimmage.

FRIDAY:

- 10 Minutes—Calisthenics and grass drills.

- 5 Minutes—Windsprints and dashes.

- 10 Minutes—Punting, kicking-off, place kicking and pulling-out-of-line drills.

- 10 Minutes—Backs on dummy, linemen on charger-blocker.

- 10 Minutes—Backs on charger-blocker, linemen on dummy.

- 15 Minutes—Blocking, against blocking apron and open field.

- 15 Minutes—Pass defense and protection.

- 15 Minutes—Backs and ends passing and receiving drill, linemen on ten defensive tactics.

- 10 Minutes—Defense for first opponent.

- 20 Minutes—Offensive plays.

- Finish—One hundred yard dash.

Third Week

MONDAY:

- Calisthenics will now be the responsibility of each boy when he comes on the field.

- 20 Minutes—Review of different offenses and defenses with emphasis on defense for every type of offense. Defense for, and offense of, the first opponent should be stressed.

- 15 Minutes—T formation, one-on-one blocking.

- 10 Minutes—Punting, receiving and tackling drill.

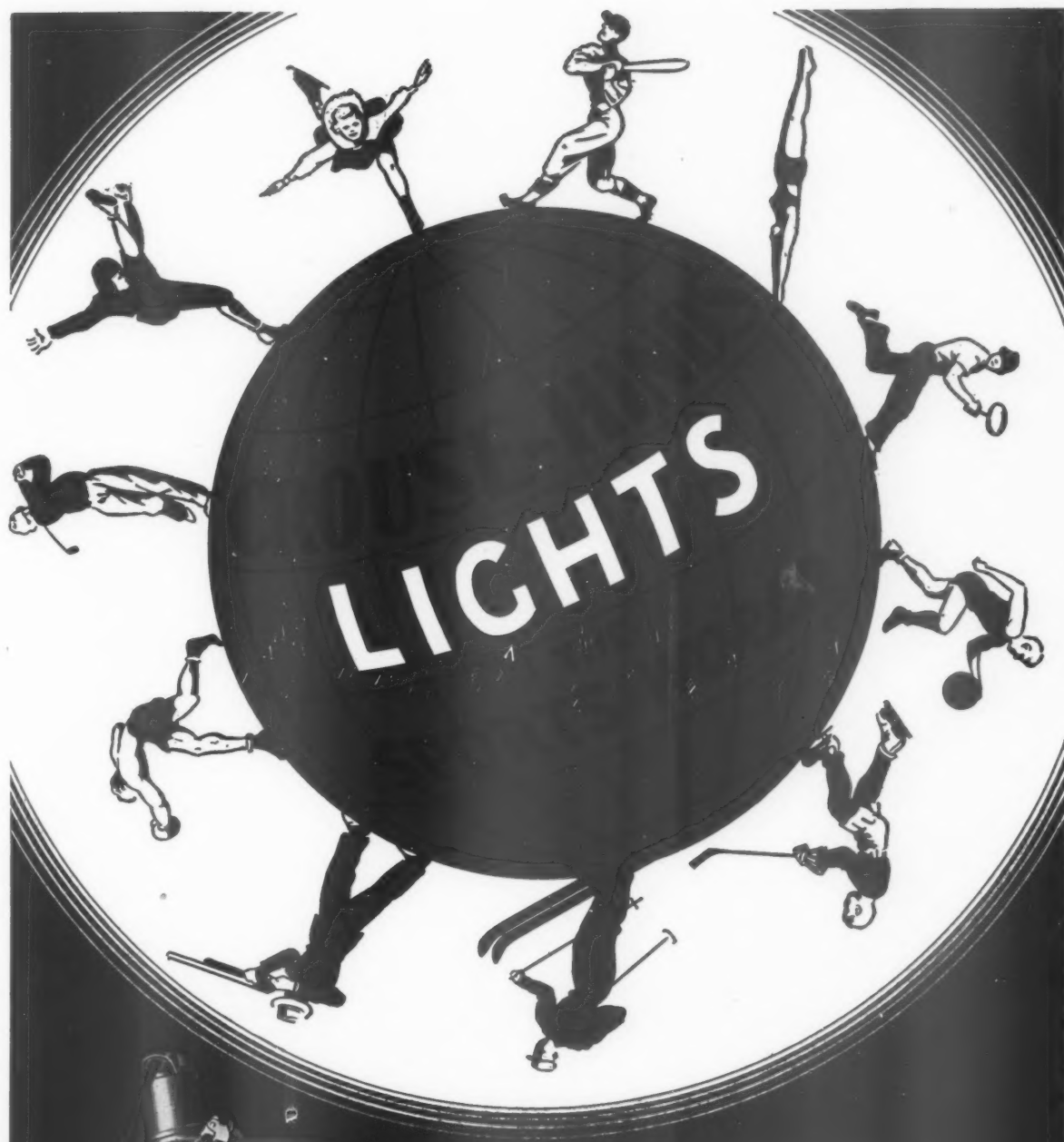
- 10 Minutes—Tackling, five-man drill.

- 10 Minutes—Kick-off, scrimmage with various options and blocking.

- 10 Minutes—Punting, scrimmage, blocking, kicking the extra point.

- 10 Minutes—Offensive and defensive pass scrimmage.

(Continued on page 36)



For your lighting under NPA Regulations and for full scale sportslighting when limitations are lifted, remember . . . "Crouse-Hinds Lights the Sports World" with an unbeatable combination . . . Crouse-Hinds Type FLA Floodlight and Crouse-Hinds sportslighting know-how!

A
Nationwide
Distribution
Through Electrical
Wholesalers



FLOODLIGHTS • AIRPORT LIGHTING • TRAFFIC SIGNALS • CONDULETS

The Coach Writes Home to College

By RICHARD W. GUYER
Football Coach, Crawfordsville, Indiana, High School

INCLUDED in this article are a series of suggestions for critical analysis by the prospective football coach.

A classification of pre-graduation and post-graduation is used as the basis of chronology in the following discussion.

Suggestions Applicable During the Pre-Graduation Period

The basis for the understanding of sound principles of coaching are derived from experiences gained while the individual is still attending the university.

To aid the prospective football coach in interpreting these experiences in terms of personal value, the following suggestions are presented:

1. *Participate in the college athletic program regardless of one's status on the squad.* Several valid reasons for this are:

a. It is easier to secure a position after graduation.

b. The opportunity is present for observation and integration into the mind of the good and bad practices in evidence at the school attended. Benefit from these observations by analyzing them and adapting them to future coaching procedure.

c. One will become better acquainted with the immediate problems of a life-like coaching situation.

d. The prospective coach should focus attention on all the positions rather than just the one he plays.

2. *Do some scouting.* Scouting is one of the excellent methods of learning football in its many varying forms. Through scouting, the future coach should discern the weaknesses and strong points of many teams, thus broadening his viewpoint. Do not confuse observing a ball game with the term scouting. They are different in purpose and in result.

3. *Attend clinics.* At clinics held annually by the leading universities and professional camps, evidence will be found of the trends of the current season. Also, the contacts with fellow coaches are of great value to an individual personally as a human relations factor.

4. *Read current literature.* Football is no longer a game of combative strength. To say it is complex, intricate, and a science is almost an understatement of fact. To keep abreast one must necessarily recognize the trends as they evolve.

BECAUSE the Journal is used in many college physical education courses, we felt that an article dealing with suggestions for a coach entering the profession for the first time would be most helpful. Dick Guyer, a comparative newcomer in coaching, has done an admirable job in analyzing the problems a young coach will encounter. Guyer was All-Indiana guard in 1946 at Indiana State Teachers College, graduating from Butler in 1947. During the fall of '48 and the spring of '49 he served as varsity backfield coach and freshman line coach at Butler, moving to Crawfordsville that fall, where in his first season as head coach he won 7 of 8 games.

5. *Use audio-visual materials.* The motion picture has made football an exacting, precise activity. Do not overlook its use when the opportunity presents itself. The eye is fallible; motion pictures are not.

6. *Observe spring practice of other schools.* If possible, visit leading schools throughout the country. These contacts will acquaint the prospective coach with varying systems, instructional methods, psychological basis of handling boys, and a number of other factors.

7. *Self-acquired enthusiasm is mandatory.* One must live football and like it sincerely. The individual alone can acquire this all-important impetus.

8. *Get experience in coaching.* Many churches, boys' clubs, scout troops, Y.M.C.A.'s, etc., would be grateful to have leadership, and in this manner one may gain invaluable experience in working with boys of public school age.

Planning for the Post-Graduation Summer

Prior to the first year of coaching, the following suggestions are made toward preparation for the season:

1. Spend the summer planning for the season to follow.

2. The prospective coach should decide on an adequate number of basic running plays and sufficient pass patterns from the formation of his choice to meet the needs of the first encounter.

3. Diagram these plays carefully and prepare a mimeographed syllabus.

4. Decide upon a simple and efficient huddle formation and numbering system. Include thorough, exact instructions for these in a booklet.

5. Attempt to construct a memory device for the players' use in learning blocking assignments.

6. Prepare a letter to be sent to the squad candidates prior to the first practice. This letter should embody enthusiasm, friendliness, and a desire to attain perfection as a squad.

7. Try to meet the assistants and plan with them for the pre-school practices. Assign duties to them diplomatically, clearly, and with a sense of co-operation.

8. Discuss with the school principal athletic insurance, budget, transportation, schedules, officials, managerships, etc.

From the above list, it should become apparent that there will be no lack of activity for the new coach throughout the summer. The author seriously advises that an attempt be made not to work or attend school the first summer. The new coach should spend the summer on football and reap the dividends in the fall.

Initial coaching experience may be broken down into various phases for analysis. The remainder of this discussion will concern itself with these phases as such, and will provide some suggestions coherent with each phase.

Applied Psychology in Football

When the coach meets the boys for the first time they are going to formulate an opinion of him. It might be well to dust that psychology book and re-read a few chapters. A few suggestions psychologically are listed. These may aid one in the evaluation the team places upon him that first day. Remember, however, that this evaluation is a continuous process and consistency is vital to team morale.

1. Be masculine in appearance and require the same of them. A white T-shirt, baseball cap, football pants, sweat socks, and a firm sport shoe are suggested.

2. Have the equipment issue efficiently planned and carried out. If it is possible, it is worth the time spent in preparation, to have equipment pre-issued and in the lockers when the boys arrive.

3. Have an attitude of confidence and stability which demands respect, but reflects friendliness.



Seal-O-San®

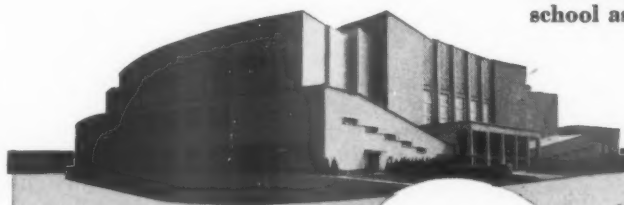
**must be used on the (University of Kentucky)
fieldhouse floor"**

Adolph F. Rupp

*SEAL-O-SAN the choice
of over 6800 Coaches*

Year after year the list of satisfied users
grows . . . many coaches, like Mr. Rupp,
would have no other finish and have
reordered time after time for nearly thirty years

COACH RUPP knows what makes the best playing
surface from long experience. He says: "I specified that
Seal-O-San must be used on the floor (of the new
Kentucky Fieldhouse), in spite of the fact that almost
every other floor finish company has been here asking
me to give them a chance to put their product on
the floor. I have refused to do so." Here he advises
Seal-O-San for every school gym floor: "I have endorsed
Seal-O-San hundreds of times every winter in letters to
school asking me to recommend the best (floor finish)."



New! 1951-52 "Basketball
Coaches Digest," packed
with helpful instructions by
leading coaches.



HUNTINGTON LABORATORIES, INC.
Huntington, Indiana • Toronto, Canada

Please send the 1951-52 Seal-O-San Basketball Coaches'
Digest Free to coaches. Others send 25¢ handling fee.

NAME _____

ADDRESS _____

CITY _____

STATE _____

4. Explain the syllabus that has been prepared thoroughly, and assign the learning of all basic plays. Psychologically, this is sound in that the enthusiasm probably will be at a peak the first day, thus presenting the best opportunity for learning to take place.

5. Emphasize winning — never imply the idea of losing.

6. Attempt to know something about each boy prior to actual contact with him.

7. Keep a time schedule and follow it; boys appreciate this and consider it a courtesy to them. It will avoid monotony, and will make practices seem shorter.

8. Emphasize the position of captaincy and the respect for it will carry over to the coaching staff.

9. Ask that the staff members be referred to as coach, but more important, they must be worthy of the title.

10. Exhibit sincere enthusiasm and optimism.

A few psychologically effective thoughts which the author considers excellent are included; the origins are to his knowledge, anonymous.

1. "A coach, a player, a team, never stands still — one of two things is necessarily evident, progress or disintegration."

2. "Give the other man credit for being a ball player — if you can better him three of five plays, your team will win."

3. "A player or a team without confidence is like a ship without a keel."

4. "If you think you can, you will."

5. "When criticism ceases, begin to worry."

6. "Co-operation is the fruit of self-sacrifice."

7. "A habit is like a cable — a thread is woven each day until the product becomes unbreakable."

The Pre-School Drills

The most important developmental period of training is perhaps the pre-school practice series. It should be remembered that this is the time when such objectives as team attitude, conditioning, system clarification, etc., should be reached. A few pertinent suggestions for pre-school practices follow:

1. Arrange practices during early morning and late afternoon in order to avoid the warmest hours of the day.

2. Make schedules for each individual practice for all assistants, denoting the respective duties on all drills. This will prevent the overlapping of responsibilities and will avoid inter-

staff confusion.

3. Correct the small things constantly. If these are brought up to standard, the large things will, in most cases, take care of themselves.

4. Develop in the team, attitudes of respect, loyalty, and confidence.

5. Exhibit an enthusiasm which is contagious.

6. Demand peak performance and do not settle for less.

7. Make all drills varied and relatively short.

8. Require all players to attend the first and all successive practices in complete uniform.

9. Hold at least two night practices if the team is to play night games.

10. Develop a desire to overcome any weather handicaps by talking up the rainy night that may come.

11. Teach an attitude of responsibility toward scholastic achievement and the entire school organization.

12. Allow certain elements to coach themselves on some of the drills. The sense of responsibility will become infectious.

After-School Drills

The seasonal drills are only a continuance of the pre-school sessions and must allow for adjustments and variations to develop. Suggested are the following:

1. Retain all practical habit patterns established by pre-school drills.

2. Scrimmage at least one full practice per week.

3. Point toward each game as it is scheduled. Never emphasize any opponent except the next on the schedule.

4. Arrange for variations from system for each game individually.

5. Allow scouts to orient the team on the opponent. Only the scout can do this most effectively.

6. Establish a sense of responsibility in each member of the squad and make him feel as if he is an integral part of the team.

7. Pre-plan the first play of the ball game to take advantage of the opponent's believed weaknesses.

8. Build enthusiasm and confidence by constantly driving home the idea that "you can win!" Mental conditioning should never be sacrificed for physical factors.

9. Establish a shorter Thursday evening practice if the team plays on Friday, but always accomplish something. Many coaches run signal drills including every play pattern to date. This serves as a refresher course in all variations from previous games.

10. Evaluate weekly the strong points and weaknesses of the team's

past performances and adjust practices to conform to this analysis.

11. Consider the psychological status of the squad daily and shift emphasis accordingly.

12. Attempt to discern the better man for each position from practice to practice as the season progresses. Then, regardless of personal attachment, play that better man.

13. Always consider each player in relation to his ability to work with the group for the betterment of team play as well as for his unique football skills.

The Game Situation

The merits of the foregoing suggestions are summed up in the final test, the game itself. Fundamental suggestions of operations on game night follow:

1. Remind the team that on trips they are guests and should conduct themselves as such. The coach, personally, should assume this responsibility.

2. Ask the squad to wear a tie and coat on trips to games away from the home school.

3. The coach should demand good sportsmanship on the part of every squad member and exhibit it himself.

4. Use positive rather than negative criticism at every possible opportunity. Emphasize that the team should work to acquire the breaks of the game and not expect the breaks to be showered upon them.

5. Have only the captain address the officials during the game. He should use the term, "Mr. Referee," when applicable regardless of personal friendship possibilities.

6. Inform the officials ahead of time of any play pattern which might be interpreted as a breach of the rules.

7. The coach who is host should inform the visiting coach of pre-game warm-up irregularities in the schedule.

8. Assume the responsibility to get the game started at the exact time scheduled if it is to be played on the home field.

9. Never attempt to win over an opponent by an overwhelming margin. This is neither good taste, nor good business.

10. Accept victory modestly. When defeated, keep in mind that the coach's reaction will determine the reaction of the entire squad. Act accordingly.

11. Make sure that all of the squad members have transportation home after the game.

12. Call or visit any players who received injuries on the day following the game.

(Continued on page 36)

MOSBY BOOKS



FOR THE INTRAMURAL DIRECTOR
FOR THE COACH
FOR THE ATHLETE
FOR THE INSTRUCTOR IN PHYSICAL EDUCATION
FOR THE SPORTS WRITER

Means' The Organization and Administration of **INTRAMURAL SPORTS**

Means gives a good account of present practices and ideas that are workable and effective — and implications for future planning. Practical suggestions are included from all kinds of schools from every part of the nation and Canada.

He considers all the social, psychological and educational connotations relative to a sound sports program and presents a complete and excellent background for the organization, financing,

directing and management of intramural sports events.

"I have never seen a better book dealing with intramurals. It should be very valuable to anyone wishing to set up or improve on an intramural program." — R. S., Western State College of Colorado

442 pages, 214 illustrations. Price, \$5.75

Voltmer-Voltmer's **MANUAL FOR ATHLETES—** *Fundamentals in Sports*

"The book, **MANUAL FOR ATHLETES**, will prove to be helpful to any person who is following an athletic career, whether it be as an active player, manager, coach, or a sideline spectator. The latter part of the book which contains very thorough discussions of fundamentals connected with the various sports is well written and quite complete in its coverage. It is the first portion of the book that I find to be particularly interesting in my work. The chapter on

"The Fighting Heart" and on "Background and Social Attitudes" are outstanding and alone are worth the price of the book. They contain information that will prove to be quite a reinforcement to the athletic director, intramural director, or physical education director." — J. R., Phoenix College

213 pages, illustrated. Price, \$3.00

Voltmer-Lapp's **THE INTRAMURAL HANDBOOK**

The purpose of this book is twofold: first, to provide the active intramural director with a handy reference when he is making schedules and planning new intramural events; second, to provide the professional student in physical education with a basic workbook in this field.

The book is not so much concerned with actual playing rules and game descriptions, as with giving tips about sports and rules that have proved helpful in the actual use of these sports in intramural competition. These tips are of value not only to the

college director of intramurals; but they also can be of considerable help to the intramural man who is trying to promote sensible grade and high school sports competition for all. It stresses the basic philosophy of intramurals — **ACTIVITIES FOR EVERYONE**. "In my opinion this handbook is needed and can be of use for better understanding of the intramural program in any size school." — P. W. B., State University of Iowa

175 pages, illustrated. (8½ x 11"). Price, \$3.00

ORDER FORM

THE C. V. MOSBY COMPANY, 3207 Washington Blvd., St. Louis 3, Mo.

Please send me:

- ☐ Means—The Organization and Administration of INTRAMURAL SPORTS — \$5.75
☐ Voltmer-Voltmer **MANUAL FOR ATHLETES** — \$3.00
☐ Voltmer-Lapp **THE INTRAMURAL HANDBOOK** — \$3.00

_____ Enclosed find check.

_____ Charge my account.

Name _____
AJ-6-51

Address _____

If it's
NEW and BETTER
it's

SPOT-BILT



Look at the developments in athletic footwear over the past twenty years, practically all of them were pioneered by the SPOT-BILT organization.

During the past year alone, SPOT-BILT has made significant improvements in Track, Baseball and Football Shoes.



The N.S.T. Track Shoe, with its Nylon reinforcement that prevents stretching, its exposed sole stitching that eliminates tanned sole, will outwear any track shoe built to date.

The new Nylon-reinforced, light weight SPOT-BILT Baseball Shoe, also without exposed sole stitching, excels in comfort and fit and outlasts shoes of conventional construction. This is the shoe the "professional" wears.

SPOT-BILT has introduced Nylon reinforcement in its better football shoes for its non-stretching, fit-retaining qualities—another first for SPOT-BILT.

Constant research, in the laboratory and on the athletic field, always keeps SPOT-BILT ahead! And every SPOT-BILT development is "field-tested," for months and years before it is offered. Only after this thorough testing—after experience has proved beyond a doubt the merit of the new development, is it offered to the coaches and athletes. For the finest—and the latest—in athletic shoes—demand SPOT-BILT.



Your SPOT-BILT dealer is fully abreast of the latest developments in athletic footwear. He will be glad to consult with you!



SPOT-BILT INCORPORATED

1833 AUGUSTA BLVD.
CHICAGO 23, ILLINOIS

Alamo Stadium-Gymnasium

By CLAUD H. KELLAM

Director of Physical Education, San Antonio Independent School District

SAN Antonio Independent School District recently completed the gymnasium addition to its Alamo Stadium property. This stadium and gymnasium belong to the public schools and are available for community or individual use on a rental basis. The gymnasium has been used for basketball games, dog shows, tennis matches, a television display by television dealers, a home appliance show, and a barber-shop quartet convention.

Need for a Central Gymnasium

The need for this plant existed many years. San Antonio, like many other cities, failed to provide adequate playing fields for football, or basketball facilities, capable of seating the crowds which have become interested in these sports in recent years. Only part of the students and a very limited number of patrons could be admitted to the basketball contests. This caused confusion and ill will, since many who wished to attend games were turned away. From a public relations standpoint this was, of course, very bad practice. The largest crowd, approximately 6,200, for a high school game, attended the city and district championship game last year. Approximately 110 games were played there last season on 53 nights, averaging about five nights per week for eleven weeks.

Cost Data — Stadium and Gymnasium

The first unit to be undertaken by the San Antonio Board of Education was Alamo Stadium. It was decided in 1940 to build this unit through the use of revenue bonds and to take advantage of such labor help as could be obtained from the Works Progress Administration, then in effect. This community had had no experience with this type of financing and there were various opinions as to whether such a project would carry its weight financially. The last seven or eight years have answered that question with a strong affirmative, and it was largely on the basis of that experience that the San Antonio Board of Education decided to add a second unit in 1949. This unit, which was completed in November, 1949, consists of a gymnasium seating

Architect — Phelps and De-wees and Simmons.

Contractor — Gilbert Falbo Company.

Backboards — the Nurre Companies.

Pads — Petersen & Co.

Scoreboards and Clocks — Nevco Scoreboard Co.

Public Address — Southwest Radio.

Lighting — Graybar Electric Company.

Heating — Dravo Unit Heaters.

Turnstiles — Perry Mfg. Co.

Weather Shields — Kawneer Company.

Floor Finish — Hillyard Chemical Company.

6,468 with all necessary facilities and features to make a complete building for basketball or other uses to which such a building can be put.

Alamo Stadium was financed originally through the sale of \$110,000 in revenue bonds bearing $3\frac{1}{2}$ per cent interest to run twenty years and to mature in the amount of \$8,000 per year. These bonds were called in after five years and reissued at a lower interest rate. This money was used for material, since the labor was furnished through the W.P.A. The gymnasium building cost approximately \$420,000.

CLAUD KELLAM graduated from Southwest Texas Teachers College in 1923 and proceeded to coach in high schools for nine years, five of them at Brackenridge in San Antonio. In 1934, when the office of Director of Health and Physical Education for the San Antonio Public Schools was established, Kellam was appointed to the position, a position he has held continuously except for three and one-half years of military service. In this capacity he is in charge of the physical education and athletic programs in 15 junior and 9 senior high schools.

It was financed through the sale of \$275,000 in revenue bonds bearing approximately 3 per cent interest and to run for twenty years. The remaining cost was paid from funds previously earned by the stadium itself, after the stadium bonds had been paid off.

This building was constructed by the Gilbert Falbo Construction Company, San Antonio and it is of Texas quarries limestone, brick, and concrete.

Neither of these projects involved the use of current tax levies. The cost per square foot of the gymnasium was approximately \$10.

The Gymnasium

Alamo Stadium Gymnasium is an integral part of the central plant and was built to harmonize with the general plan. The building is so designed that future seating capacity may be added if needed.

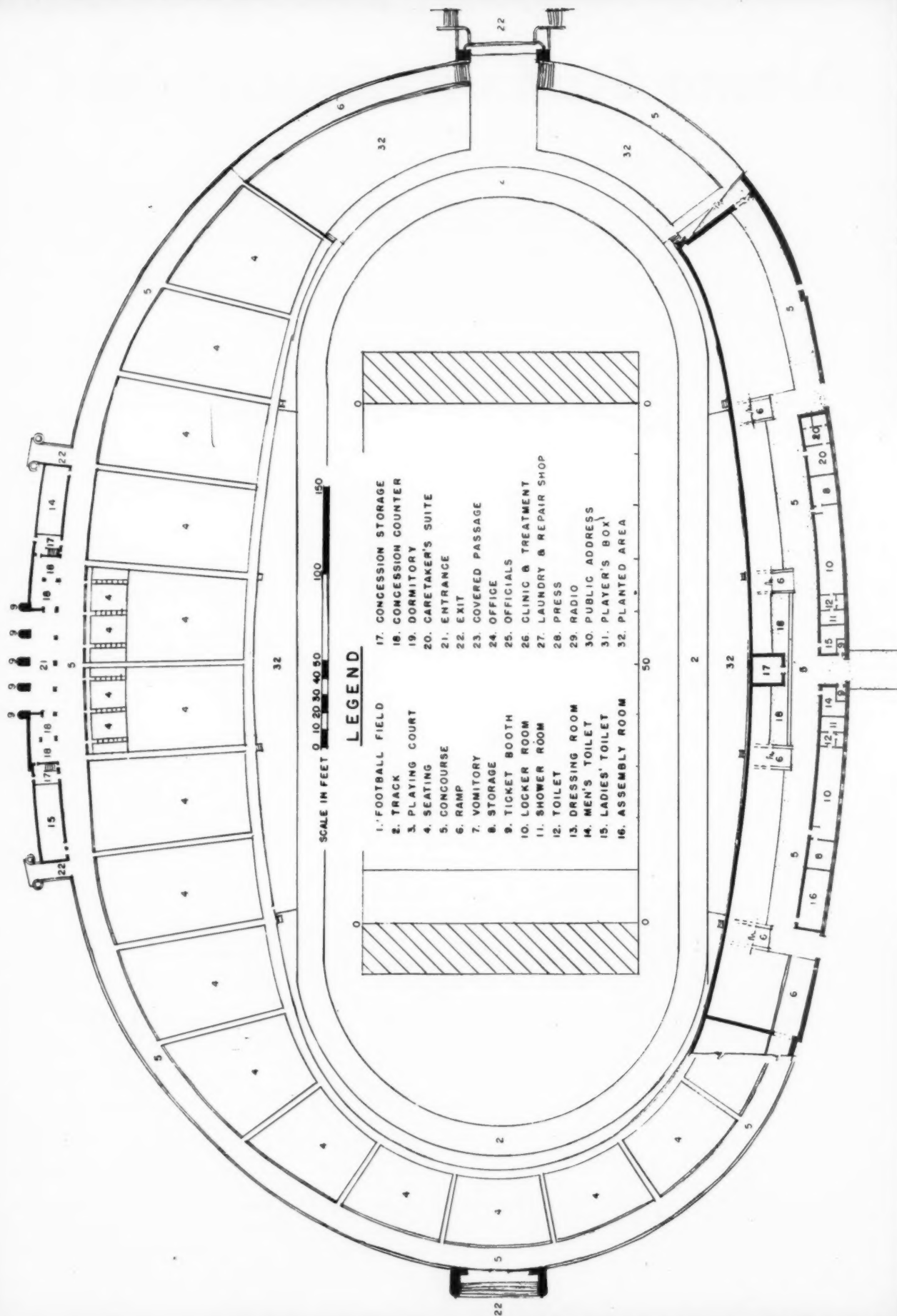
The east end is finished with heavy corrugated asbestos siding. Supporting columns and trusses were designed with an addition in mind. Approximately 2100 seats can be added by finishing the east end to balance the west end. The present capacity is 6,468.

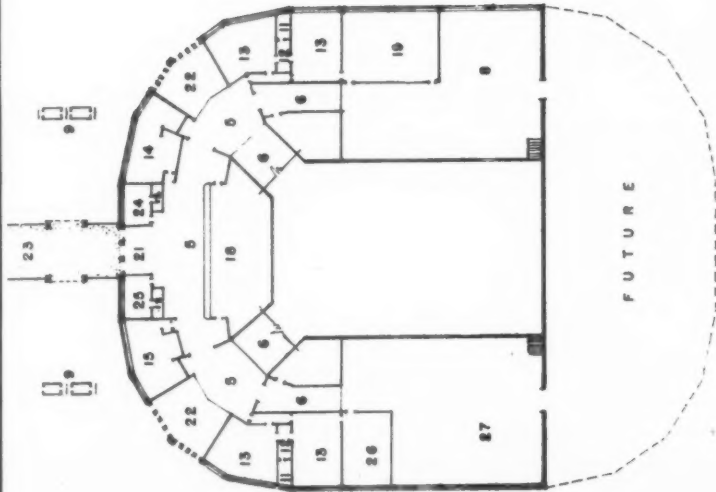
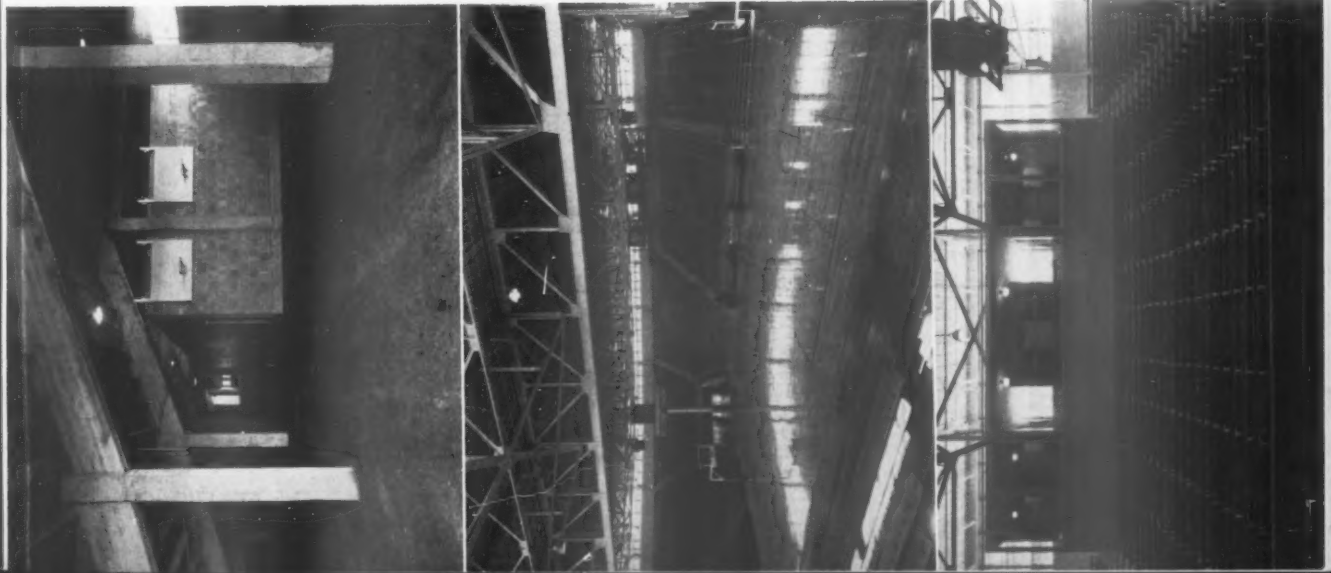
It is equipped with all necessary shower and locker rooms, press booths, rest rooms, and a small dormitory. There are large concession stands inside the main entrances. The building is so designed that a good view is had of the playing floor from any seat.

The gymnasium, 176 feet x 197 feet, is approximately 100 feet from the stadium and is connected to it by a concrete slab roof and chain link enclosed asphalt walk. Ticket booths for twelve sellers are located well away from turnstile controlled entrances. The same east entrances into the covered walk area are used for the gymnasium and the stadium. There are four large locker and dressing rooms, an officials room with private bath, offices, storerooms, rest rooms, concession stands, clinic and a dormitory room with forty-eight single beds in the gymnasium. The dormitory is available to visiting teams who are not planning to stay in San Antonio over night.

Removable pipes, set in sleeves and held with pins, are located so that

(Continued on page 44)



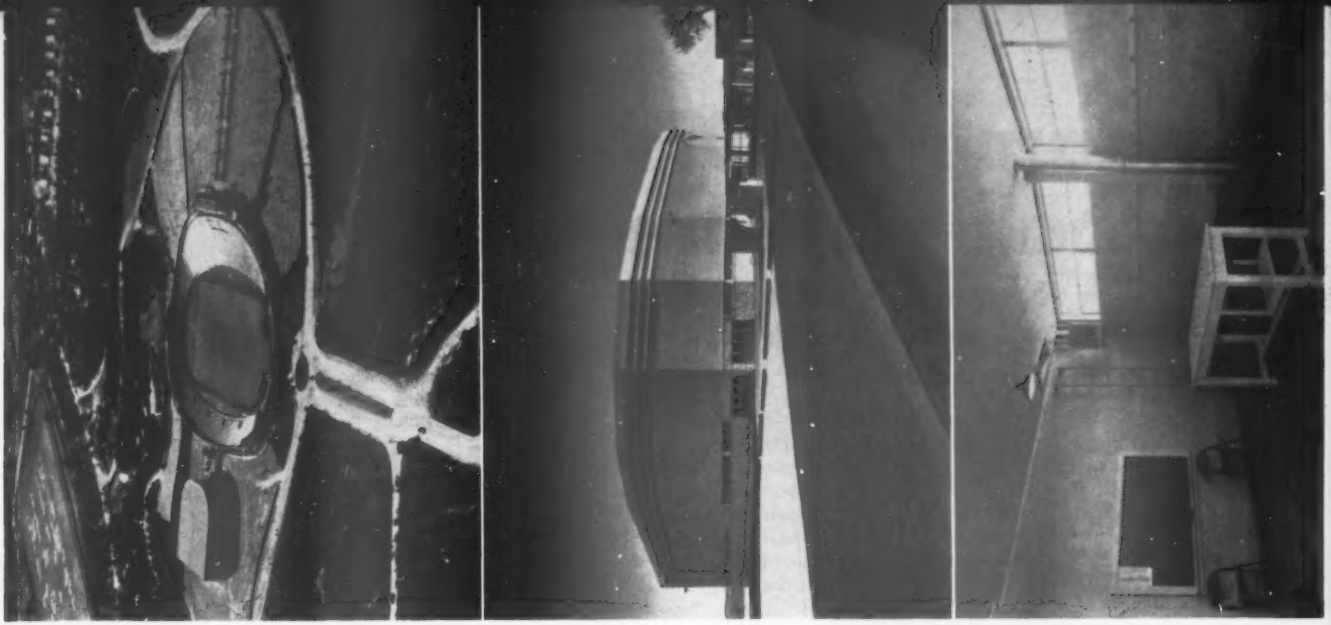


Illustrations Left

1. Space beneath gymnasium seats used for warm-up for basketball team.
2. Interior view, Alamo Stadium Gymnasium.
3. Interior showing two radio booths, press box and public address booth at back; players benches and scorer-timer table at front.

Illustrations Right

1. General view showing stadium and gymnasium building with surrounding parking areas.
2. Alamo Stadium Gymnasium.
3. Locker room interior—Alamo Stadium Gymnasium.



Fundamental Drills for Teaching Football Fundamentals

By FORREST W. ENGLAND

Football Coach, Arkansas State College

NOTHING makes football teaching contain more meaning for the high school or college player than the effective use of well planned and timely drills. Each drill must be designed to incorporate the specific fundamentals that the coach plans to use, either in his offensive or defensive patterns of play.

If a coach has a number of effective drills at his finger tips, he may draw upon a few each day to help achieve the coaching objectives that he seeks. If these drills are not systematized, the coach is likely to find himself unable to recall that fine little drill he picked up at the coaching clinic two years ago, etc.

"What shall we do today?" is probably the most frequent question which comes from the lips of head coaches throughout the country during the football season. The chief clue the head coach has in determining what his squad should be working on the most, once the season gets under way, lies in asking himself and his staff six fundamental questions. These are: 1. How is our running game? 2. How is our defense against the running game? 3. How is our passing game? 4. How is our defense against the passing game? 5. How is our kicking game? 6. How is our defense against the kicking game?

When any weaknesses become evident the coach knows he has neglected some important phase of his teaching. Perhaps he has spent time in teaching how the very weakness should be avoided but possibly his selection of a method did not involve the use of a simple, effective drill.

In keeping with a sound psychology of instruction, the teaching of drills should involve as much fun, game condition and competitive opportunity as is possible.

All drills logically fall into one of three classifications: 1. Individual

drills. 2. Group drills. 3. Team drills.

In determining the exact number of drills to use for the season, the coach should break his offense down into all of the fundamentals the men playing each position need to know to execute the offense, and do likewise for the fundamentals the men at each position need to know to execute the defensive patterns. Many times the coach will be amazed at the relatively small number of really important fundamentals that must be mastered by an end, a tackle, a guard, a center or by a back. His next job is to select the vital drills that will help inculcate these fundamentals into the player's reactions.

The following group of thirty-six drills are beneficial to a coach who uses the T formation offense. The great majority, of course, are quite useful, regardless of the type of offense used.

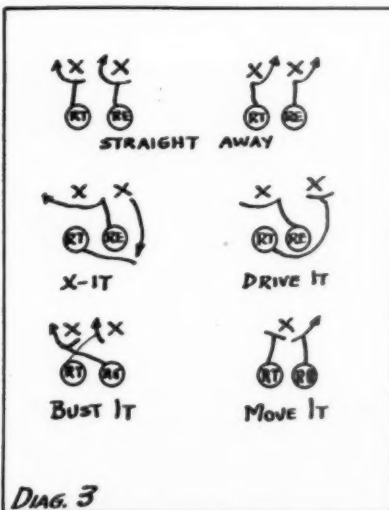
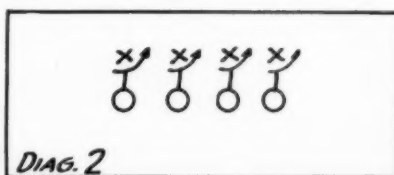
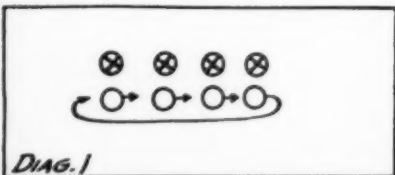
Drill No. 1 is beneficial in having each T formation quarterback become accustomed to taking the ball from each center on the squad, as well as getting the centers used to snapping to each quarterback on the squad. It is a valuable drill to teach all quarterbacks to use the same cadence in their signal calls. The quarterbacks rotate to their right, with the man on the extreme right taking his next turn with the center on the extreme left. Diagram 1 illustrates the set-up.

In Drill No. 2, the seven-man offensive line should be worked at the seven-man sled with the playing quarterbacks giving the charging signals. There is probably no other fundamental a team may master that will pay greater dividends than having the seven offensive linemen cracking exactly as a unit with the snap of the ball. The sled is a good place to practice a little signal anticipation. We feel the offensive line must practice their fast charges with the quarter-

FOLLOWING graduation from Illinois College, where he played under Ray Eliot, "Frosty" England coached for seven years in Illinois high schools. He then was at University City, Missouri, High School for four years before assuming his present position five years ago. He has authored numerous articles as well as the excellent text "Coaching the T Formation." Recently he produced a film on his specialty, the T, an offense he has used since 1942.

backs who will be calling the signals behind that line.

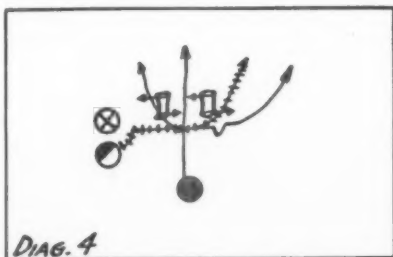
In Drill No. 3, we are trying to teach the fundamental of one-on-one blocking. After the linemen are taught the three phases of a good in-line block which are: 1. the approach, 2. the jolt, 3. the follow-through, then they are worked on Drill No. 3. Here we have one offensive lineman working against a light inflated hand dummy that is held by another player. The dummies should be kept at least three feet from the offensive blockers so they will have to make a good fast approach. The coach should stand behind the men holding the dummies and give a hand signal indicating the direction the defensive man is to be taken—one yard to the right or one yard to the left, but never backwards. Diagram 2 shows this drill.



Drill No. 4 represents the optional types of co-operating blocks that are used in our offense by the tackle and the end working next to him. One of these two men on each side of the line is designated as the *brains* of the pair and he may call the type block he feels will take care of the blocking for the play that will have its point of penetration in their area. He may shout *straight-away*, *x-it*, *drive it*, *bust it*, or *move it*. All of these calls indicate a co-operative maneuver between the two men in their blocking plan. We work on this drill by having two men holding air dummies in every conceivable defensive arrangement that is possible. This drill is illustrated in Diagram 3, and is the key to a great deal of successful T formation offense.

Drill No. 5. When a coach has his boys working at the tackling dummy it is economical in time, and important in teaching what is often a game-saver, to have the players get up and go for the recovery of a loose ball that the coach throws out in all imaginable directions on the ground. The coach should call *ball* at the sight of the fumble or loose ball and the players should recover the ball properly. This part of an important fundamental may well be inserted at the conclusion of a drill on many other fundamentals.

In Drill No. 6, we are again making use of that fine mechanical device, the seven-man sled. We like to use our sled for a great deal more than offensive charging. Our players practice the forearm shiver at the sled. The coach should be sure these defensive linemen keep their legs churning. When the coach gives the word, they slide to their right and take another forearm shiver at the next padded post. On command they slide back to their left, etc. This drill is excellent for stressing leg action and agility. We also like to have the players sprint completely around the sled on command after they have finished their forearm shiver charge or power charge. One of the other favorites at the seven-man sled is to have the seven defensive linemen take their charge, keep the feet churning and at a command reverse pivot in the

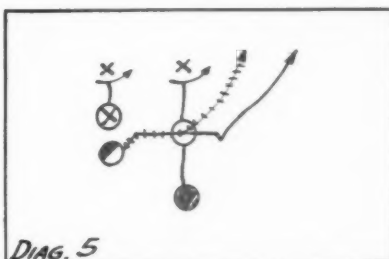


DIAG. 4

direction the coach points, and sprint to a point where an imaginary wide play by the offense is going. On this drill, the weak-side end will chase the play around the sled while the weak-side tackle is getting the exact game maneuver, (reverse pivoting and rolling to a point deep on the far side), we like him to make when the play is wide to his far side.

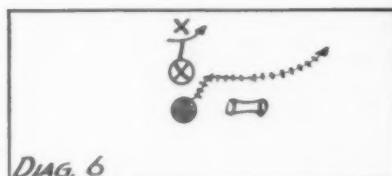
In Drill No. 7, illustrated in Diagram 4, we set two dummies close together (one yard apart) to give the halfbacks practice in taking the ball from the quarterback. We instruct the halfback not to watch the ball, but to keep his eyes on the area between the two dummies that are being moved a yard to the left or a yard to the right by the men holding them. The halfback must always take the ball at the same spot and then cut for the hole. We do not want him to angle toward the hole immediately from his starting position, but to cut into the hole after he has taken the ball from the same spot which is directly over the ground that the offensive tackle was standing on.

Drill No. 8 is excellent to use in teaching the halfback to cut in the opposite direction from which his offensive tackle is blocking the defensive man playing in front of him. The coach must prod the halfback for more speed and yet make sure that he is running on balance so that he may make the proper cut. This drill is illustrated in Diagram 5, and is best when practiced with *live bait* after some work has been done passively.



DIAG. 5

In Drill No. 9, shown in Diagram 6, we like to place a dummy beside our quarterback. This will help teach him to take his step forward and outward before the ball strikes his hands. Before the ball has touched his hands, he should place his right foot on the ground upon which his right guard was standing. This is when the hand-off or fake goes to his right as shown in the diagram. The quarterback is now in a position to move in the area up in the line of scrimmage. This is where his split T hand-offs should be made—up in the line and not behind the line. If he does not



DIAG. 6

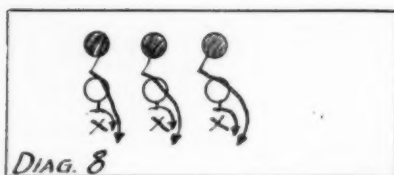
go through the described footwork, he will stumble on the dummy.

We call the No. 10 Drill, "Live or Die." It is shown in Diagram 7. This drill helps straighten out any misunderstandings that may exist in the minds of the linemen competing for a given position regarding who is really the best man for the job. We place two dummies about four yards apart. Between these dummies is placed a candidate for one of the line positions. This player takes the defensive. Opposite this defensive man is placed his competitor for that same position. This man is on the offensive. A third man who is to carry the ball is placed about three yards directly behind the offensive man. The coach stands back of the defensive player. He signals the direction that he wishes the defensive man to be blocked. The ball-carrier runs in a given path in order to set the defensive man up for the blocker. Each man takes five turns on the offensive and five turns on the defensive. If the defensive man fights off the blocker and makes the tackle between the dummies, he is credited with one point. If the offensive man prevents a tackle from being made, he is credited with one point. We know of no other drill to better classify the linemen regarding in-line ability. A coach should play the boy who makes the highest score on this drill and he will have the best man for the position on the field. This drill may also be used to call for pass protection skill on the part of the offensive lineman. When this signal is called, the coach should have the ball-carrier simulate a passer. The offensive man must keep the defensive man off of the passer for five seconds in order to earn the point.

We feel that it is best always to have a ball-carrier behind the offensive blocker when teaching one-on-one blocking. This is the factor that makes for live game reaction and is actually the only reason why one offensive man should be able to handle one de-

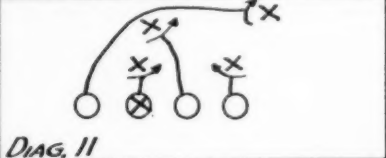
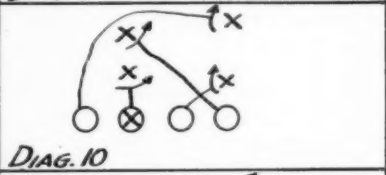
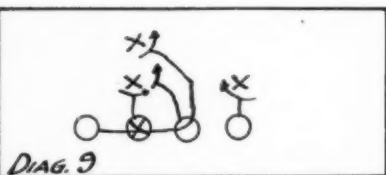


DIAG. 7

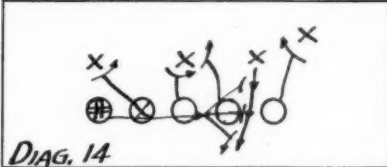
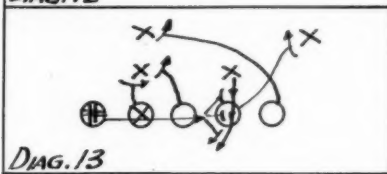
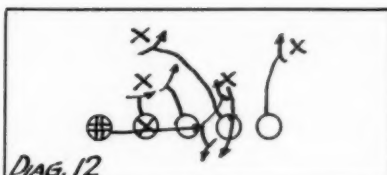


fensive man. In Diagram 8, we are working in groups of three. The ball-carrier must take a path to help his offensive blocker. The defensive man tries to fight the blocker off and make the tackle.

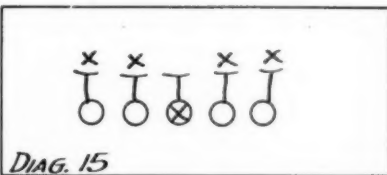
In Drill No. 12, illustrated in Diagrams 9, 10 and 11, we are working the center, guards and one tackle on a very common type of mid-line blocking. This blocking concerns a five-man defensive line. These drills are usually performed against *live bait*.



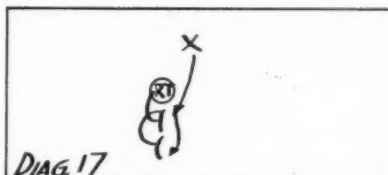
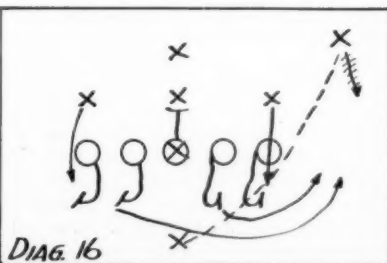
We are trying to teach mousetrap blocking against a five-man defensive line set-up in Drill No. 13. We like our offensive tackle to block the middle linebacker as is shown in Diagram 12. If he has undue difficulty in clearing the man near him, who is to be trapped, the blocking arrangement may be altered with the offensive tackle now blocking the outside linebacker, and the offensive right end blocking the middle linebacker (Diagram 13). It is in this drill that we stress the footwork of the guard who is pulling to execute the trap. After he gets his footwork in pulling, he must follow a line close to, and parallel to the line of scrimmage. When he reaches the spot indicated in the diagram, he must get the defensive man we are trying to trap. This man may be waiting. He may be only one or two steps across the line or he may have penetrated deeply—three or four steps. We like to place an air dummy in the hands of the man to be trapped



and have him be at any one of the three possible points. This will certainly sharpen the trapping skill of the guard. Diagram 14 illustrates this drill against a 6-2-2-1 defense.

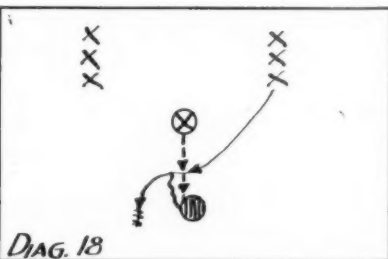


In Drill No. 14, we are practicing pass protection. This drill is illustrated in Diagrams 15 and 16. For short passes, we ask the line to charge hard straight ahead. This is shown in Diagram 15. For long passes with three possible receivers out we protect, as is shown in Diagram 16. Against the five-man defensive line, we have two guards as safety men to pick up rushing linebackers, or if there are not any rushing linebackers, they are free to help a teammate who needs help. The guards are assigned to cover to the side a pass is thrown just as soon as the pass leaves the passer's hands. This is not a bad precautionary measure against pass interceptions. In all of these drills, we want these guards to do this very maneuver,



and often the coach will throw an intentional interception to one of the men stationed in the area of a defensive halfback. On several occasions we have been glad that we worked on this drill.

Drill No. 15, shown in Diagram 17, shows a maneuver we teach our guards and tackles to use when on pass protection. It is to be used only as a last resort measure, when the man a player is working against has gotten around him and is rushing in to make the tackle on the passer. Here the guard or tackle makes a reverse pivot and by doing so will find himself brought directly back into a pretty fair blocking angle to continue

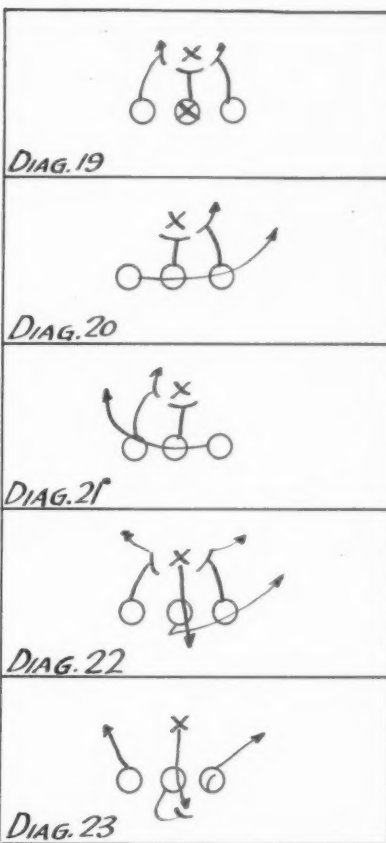


his blocking job on the rushing opponent. All through our pass protection drills, we stress to our protectors that if they will not let their shoulders get beyond their toes, keep their tails down, their knees bent and their feet spread and let the rushing defensive men bring most of the pressure while they keep contact with them and keep a good angle, they will be doing a first class job of protection for the passer.

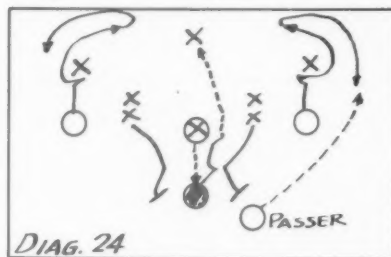
Twice each week we take a few minutes to work all the defensive linemen on Drill No. 16, as is shown in Diagram 18. In this drill, the linemen are asked to block four punts each, recover the blocked punt and advance it. The linemen aim at a spot six feet in advance of the spot where the punter is standing, come in leaping high in the air with both arms crossed in front of them. It is surprising how many boys are shy of the contact that comes in blocking a punt and how they forget what to do once they have blocked the punt. Sometime during every season, this one drill will pay big dividends in picking up a blocked punt and running with it to score, or at least

to recover the ball. Many times we have our linemen tackle the tackling dummy, fall on a loose ball, get to their feet again, block a punt and pick it up to run with it. We believe this is a wonderful teaching drill for all defensive linemen. We do not think it is wise to let the best punters carry out the part of a punter who is having his kicks blocked.

In Drill No. 17, we are attempting to place the defensive linemen in the roughest kind of a situation. Here we have three offensive linemen working against one defensive man. Any one of five maneuvers may be used against the defensive lineman, and with the coach standing behind the defensive man to signal the maneuver that he wishes executed, much may be found out about the defensive man's true ability. This is a good drill to put the defensive linemen through when the next opponent is to be a power type team. There are far too many men today playing T formation football who need this drill to toughen them for the vicious play of power teams. Diagram 19 shows three offensive men wedging or powering the defensive man. Diagram 20 shows the two men to the right using a post and pivot block on the defensive man to move him to the left. The opposite situation is found in Diagram 21. In Diagram



22, the two outside men fake blocks at the defensive man and let him in to test his reaction toward the trap situation. The center man pulls either toward his right or his left. In Diagram 23, the man in front of the defensive man takes on pass protection maneuvers, and we are anxious to see if the defensive man is going to sense the situation quickly and attempt to rush the passer hard.



In Drill No. 18, as is shown in Diagram 24, we are attempting to give the punter practice under pressure by having a man rush him, and at the last second before they would ordinarily block the punt, fan away from the punter. These men should set up about four yards back of the line of scrimmage to make for better timing. In this instance, we want our ends to get practice in this drill by going down under punts. We want our ends

FIRST THOUGHT FOR FIRST AID

Vaseline Sterile Petrolatum Gauze Dressings

TRADE-MARK ®

Chesebrough Mfg. Co., Cons'd • New York 4, N. Y.

Professional Products Division

VASELINE is the registered trade-mark of the Chesebrough Mfg. Co., Cons'd

To Open

foil-envelope, cut with scissors along dotted line on back of envelope... or in an emergency, tear off seal carefully below this line... end of dressing is pulled out of envelope with one hand (use forceps, if handy), while envelope is held with other hand.



Cover

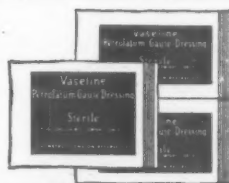
damaged surface and area two inches beyond with two layers or more of petrolatum gauze dressing... then apply sterile dry bandage to keep clean and hold gently in place—using first-aid principles... have injury examined by a physician.

*always sterile
always ready*

For immediate and easy application, to dress a Burn, an Abrasion, certain other Surface Injuries.

ready-made... compact...
soothing... non-sticking...
non-contaminating...

USED DIRECT FROM HANDY
FOIL-ENVELOPE

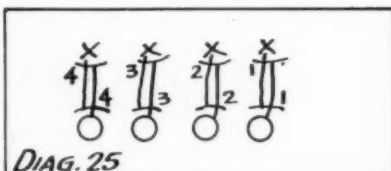


Two Sizes:

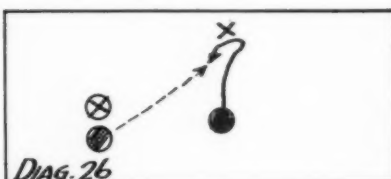
Unit envelope: one 3" x 36" dressing.
Duplex envelope: two 3" x 18" dressings.
Six envelopes to the illustrated carton.

OBTAINABLE FROM YOUR
USUAL SOURCE OF MEDICAL SUPPLIES

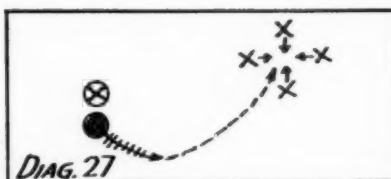
to form the habit of faking the defensive halfbacks to the inside and going around them on the outside. A safety man is stationed deep to catch the punt. When the two ends return they are to catch a pass thrown by a passer who is stationed near the punter. This gives the ends a fundamental job to practice on their way down, and another fundamental to work on as they are returning. In this drill, six fundamentals are being practiced.



We call Drill No. 19 the *rounders drill*. It is illustrated in Diagram 25. We use this drill to teach and practice tackling and blocking. Rather than having all the men in one line take their turns at the same time, which makes it most difficult to detect errors, we ask one man to take his turn; then the man in the same line next to him goes. In this fashion the coaches are better able to detect errors and successes. The coach should make certain that the men are stationed at least six yards apart to prevent injuries. As soon as all men in one line have taken their turns, the men in the opposite line start their turns, one at a time.



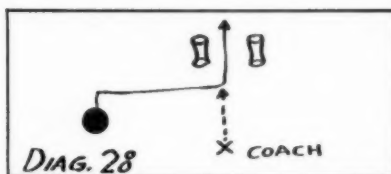
Drill No. 20, illustrated in Diagram 26, shows a set-up that will do more than anything we know of to teach defensive backs that they are weak on pass defense. It will soon educate the backs to the importance of this most important fundamental, pass defense. The end knows where the pass will be thrown. By using almost any type of fake or feint, the end may free himself to receive the ball. This drill literally makes fools out of the defensive backs and soon they are shocked into the realization that pass defense is hard work, they are under a severe handicap and they need considerable work on this skill. It is not necessary to tell the backs the extent of their handicap in this drill. Too many backs believe they are



good on pass defense and when practicing it, they loaf.

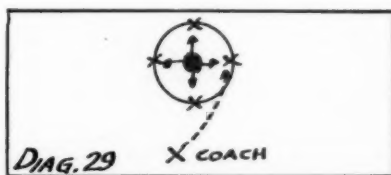
In Drill No. 21, illustrated in Diagram 27, we throw the ball out among four or five defensive backs to give them practice in fighting for it. Here we try to stress that the ball should be caught, if possible, above the head. If another man has his hands on the ball, it should be twisted away from him. The flight of the ball should be judged by watching the front nose of the ball. In this drill, the ball should be played hard. Contact will not matter as long as the players are making a bona fide attempt to play the ball.

In Drill No. 22, shown in Diagram 28, the objective is to get the end,

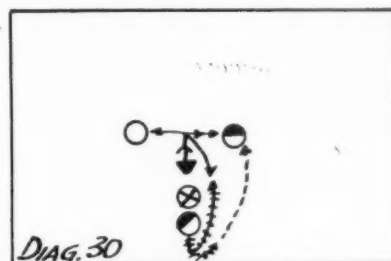


who has caught a pass, to cut immediately toward his own goal line. We stress that *they only measure the yardage one way*. Most ends have a tendency to float three to seven yards when catching a pass before realizing that they should be touchdown bound. This is especially true when the end is running over a course that takes him parallel to the line of scrimmage. We place two dummies about six yards apart. The end is thrown a pass that he is to catch in the area just between the two dummies. We ask him to pivot sharply and cut toward his goal between these two dummies.

Drill No. 23 is excellent to stress to the defensive halfbacks and safety the need for covering a considerable amount of ground just as a good center fielder would do in baseball. If he is going to knock down or intercept many passes, he must be able to cover an area which is ten yards to his left, ten yards to his right and



at least ten yards to his rear. Diagram 29 shows the defensive back placed in the center of a circle with a ten yard radius. Four possible receivers are placed at points of equal distance on the outer rim of the circle. A passer stands about thirty yards from the circle and throws to any one of the receivers. We contend that the only one of the possible receivers, who should be allowed to catch the ball without doing undue damage, is the nearest receiver to the passer. Even in this situation, the defensive man should be hard on the play although his action must involve considerable caution. In this drill, the players are instructed to do the following: see the ball leave the passer's hands; watch the front nose of the ball; intercept it if they can; if they cannot intercept it, they should knock it down with both hands, driving it directly to the ground; fight for the ball, be determined.



In Drill No. 24, illustrated in Diagram 30, we are attempting to train the linebackers to react quickly in the event of a pass and also to give them practice in seeing fake pass plays that develop into runs. We station two ends about seven yards apart and seven yards behind the line of scrimmage. The linebacker takes his place two yards behind the line of scrimmage. When the coach or passer takes the ball from the center and fades backward, the linebacker breaks ground immediately and tries to watch it leave the passer's hands and be there to knock the ball down or intercept it as it arrives at the location of one of the two possible receivers. About every third time, the passer should fake a pass and then run with the ball toward the line of scrimmage. When the defender sees this happen he should react immediately to meet the passer at the line of scrimmage. The rule here is the old saying, "he go, I go, he come, I come."

When the end coach arrives on the field, he should immediately gather the ends together and have them line up opposite one another, form-

(Continued on page 48)



**FOR CONTINUOUS
STAR PERFORMANCE
ON EVERY FIELD
OF SPORT...**



**BOXING and
WRESTLING**



YOU CAN RELY ON
Riddell
CHICAGO

**Specialists in Finer Athletic
Equipment for Head and Foot!**

Injuries to the Neck

By J. BLAINE RIDEOUT

Head Trainer, University of Nebraska



THE seriousness of neck injuries is generally known and the term "broken neck" is considered by many to be synonymous with instant death. This, however, is not always true. Many fractures of the spine in the neck region do not lead to instant death or even to paralysis. We have been amazed on several occasions by athletes who have had a marked displacement of the vertebrae of the neck with little or no paralysis.

These injuries are always handled with the greatest care by the trainers and the medical profession because the disastrous consequences of careless handling are well known. Athletes with injuries of this type must be handled carefully from the moment of injury if disastrous results are to be minimized. In general, players must be instructed not to handle an injured teammate roughly in an effort to stimulate early recovery. The injured player should not be moved until he has been examined by the most competent person available on the field, whether that individual is a trainer, coach, or team physician.

If examination on the field indicates a neck injury, transportation from the field should be accomplished correctly. Indications of a neck injury may be (1) pain in the neck, back of head or shoulders; (2) pain or numbness extending into either or both arms; or (3) numbness or inability to move the lower extremities. When any one of these symptoms is present, the player should be handled as one with a serious injury; all symptoms need not be present by any means. In a player with any one of these symptoms, rough handling or careless motion may sever the spinal cord and cause paralysis. It should be remembered that the spinal cord cannot be repaired either by nature or by surgery and once the damage is done, it is permanent.

The stretcher which we have impro-

vised for the transportation of athletes with neck injuries is an ordinary stretcher with a traction halter suspended or attached to a crosspiece at one end of the stretcher (see illustration). The foot end of the stretcher is carried lower than the head end. This allows the body weight to give the needed traction.

The cost of the traction halter is about \$6.00 but probably it could be made for less by a good seamstress or harness maker. This halter must be applied carefully and this again should be done by the team physician, trainer, or coach. The athlete then can be safely carried to the side lines or training room where the responsibility for his care should be given to a physician. If the injury is found not to be serious after careful investigation, it should not be felt that the effort has been wasted, for it may well be that the player's careful handling prevented serious injury.

Through the years of coaching football, perhaps no serious consequences from such injuries have been seen in cases where much less elaborate

precautions were taken. We know this is true in many instances, but we also know that one preventable tragedy in a lifetime will seem too much after it has happened. We also recommend that the physician's advice be followed in regard to the time of return to play for a man who has had a neck injury. Each injury must be evaluated separately and no general rule may be given. We must remember that the player and his family are depending upon our judgment for his safety. The team physician, of course, has a responsibility not to withhold a man unnecessarily from play. If, in his best judgment, he believes a man temporarily or permanently unsound for play, the wise coach will comply with those recommendations.

There is one exercise which we have used as a part of our calisthenic drill, especially to strengthen neck muscles. It is the bridging exercise that is used by all wrestlers.

It is interesting to note that during the past football season we had no neck injuries on either the varsity or freshman squads.

When an athlete is released by the team physician after a serious neck injury, he is immediately given more neck and shoulder exercises before returning to full contact work.

In summary, we would like to emphasize these points concerning neck injuries:

1. Neck injuries must be handled carefully from the moment of injury, if disastrous results are to be minimized.

2. It should be remembered that the spinal cord cannot be repaired either by nature or by surgery, and once the damage is done, it is permanent.

3. We must remember that the player's family is depending on our judgment for his safety.

4. Exercises taken properly will minimize neck injuries.

BLAINE RIDEOUT graduated from North Texas State where with brother, Wayne, he gained worldwide track recognition as a member of the Rideout Twins. He was a member of the distance medley relay team which set a world's record at the Penn Relays in 1938. During the war he was a combat corpsman with the 4th Marine Division. Upon discharge from the service he coached track at Denton, Texas, High School and in 1947 went to Texas A. & M. as head trainer. In 1949 he went to Nebraska as head trainer. The April issue carried an excellent article by Rideout on "Treatment for External Ankle Sprain."

measure now!
... order now!



for "on time"
delivery on

*MacGregor
GoldSmith*

FOOTBALL
UNIFORMS

Remember—
MacGregor Goldsmith "made to
measure" football uniforms must be
made to your individual measurements
and in your individual colors—
and that takes time!



order today!



We are grateful to you for the constantly growing demand for MacGregor Goldsmith "Made to Measure" football uniforms. You can help us to improve our service by placing your orders with complete specifications NOW to expedite "On Time" delivery. Orders are processed in the rotation in which they are received. To avoid disappointment, ORDER NOW.

MACGREGOR GOLDSMITH INC.

"Scores in every field of sport"



CINCINNATI • NEW YORK • CHICAGO • LOS ANGELES

NEW BOOKS

Best Sport Stories—1951, Edited by Irving Marsh and Edward Ehre. Published by E. P. Dutton and Company, New York. \$3.50.

In this book, an annual affair, appear a collection of sport stories which touch on practically every sport. In addition to sport stories, the best sport writings in newspapers and magazines, as well as the best action shots, were selected by a jury consisting of Franklin P. Adams, John Chamberlain and Quentin Reynolds. A collection of these anthologies through the years makes for a great sports library.

Developing Democratic Human Relations Through Health Education, Physical Education and Recreation. Published by the American Association for Health, Physical Education, and Recreation, Washington, D. C. Five hundred and sixty-two pages. \$4.25.

This, the first yearbook of the Association, resulted from two years of planning, writing and editing by forty men and women who are national leaders in the areas of health education, physical education and recreation.

Coach Writes Home

(Continued from page 22)

The Post-Season Follow-Up

After the season is finished, a series of tasks will confront each and every coach. A few important obligations are suggested by the following:

1. Re-establish the loyalty of the squad to coaches of the following seasonal sports.

2. The football coach should devote to the following seasonal sports the same type of fervor and endeavor that he desired of the assistants during his season.

3. Maintain a close relationship with the squad members as individuals and guide them constantly toward higher scholastic and athletic goals.

4. Make a survey of all equipment and see that it is properly cleaned and repaired for the following year. Keep an accurate inventory and aid in requisitioning new materials needed.

Fundamentals of Track and Field Athletics by George E. Gauthier and George E. Haney. Published by Burgess Publishing Company, Minneapolis, Minnesota. Eighty-three pages, large size, spiral bound. \$2.50.

The book is designed to be an assistant coach in that it is intended to give the athlete the mass of information that the track coach wants his boys to learn but has no time to give them himself. At the conclusion of a chapter on the various events, there is a sample mid-season practice schedule.

To the many coaches who have longed for a track assistant, here is a very good one indeed.

Physical Education: Organization and Administration, by J. B. Nash, Francis J. Moench and Jeannette B. Saurborn. Published by A. S. Barnes and Company, New York. Four hundred and ninety-eight pages. \$3.00.

That eminent authority on physical education, Jay B. Nash of New York University, has collaborated with two other highly regarded individuals in the field, Francis J. Moench of Cortland State Teachers College, and Jeannette Saurborn of the Bronxville School System, in authoring a thorough and comprehensive book.

5. Re-evaluate personal coaching techniques and revise them to better the over-all result.

6. Consider the abilities of each player remaining for the next season and plan play patterns adapted to their individual strengths and weaknesses.

7. Strive to maintain model intellectual, moral, and physical characteristics throughout the entire year.

The series of problems and suggested solutions which have been listed should not be considered as a magic formula for successful coaching.

A coach will find that there are many methods of meeting these problems successfully. It is his obligation, as a member of the coaching profession, to assimilate the ideas of many; weigh the advantages and disadvantages of each of these ideas; and decide upon the solution, which in his specific situation, will most efficiently produce the desired result.

The responsibility of the coach to the youth in the American high school

is tremendous. Mold them with sincerity, enthusiasm, intelligence, and friendliness. In these qualities lie the fundamentals of truly great coaching.

Plan Your Practice

(Continued from page 18)

20 Minutes—Offensive plays.
20 Minutes—Dummy and charger-blocker work with linemen and backs alternating 10 minutes each.
Finish—Two laps around the field.

TUESDAY:

5 Minutes—Windsprints and dashes.
15 Minutes—Linemen—pulling out, ten defensive tactics. Backs—offensive backfield play, ball-handling, footwork, etc.
10 Minutes—Pass defense, two teams offering token resistance.
10 Minutes—Blocking on apron and on each other, open field.
10 Minutes—One-on-one and two-on-one drills.
20 Minutes—Charger-blocker and dummy—alternating.
20 Minutes—Offensive plays.
40 Minutes—Scrimmage.
Finish—One hundred yard dash.
Note: Scrimmage is listed, if the opening game is scheduled for Friday.

WEDNESDAY:

5 Minutes—Windsprints and dashes.
15 Minutes—Review first opponent, strength, weakness, offense, defense, etc.
20 Minutes—Charger-blocker and dummy—alternating.
10 Minutes—Punting, receiving, blocking, tackling drill, cross-blocking.
10 Minutes—Tackling, five-man drill.
10 Minutes—Kick-off and place kicking scrimmage.
10 Minutes—Offensive and defensive pass scrimmage.
10 Minutes—One-on-one and two-on-one drills.
30 Minutes—Offensive plays.
Finish—Two spirited laps.
Note: If a game is scheduled for Saturday, a scrimmage would be in order on Wednesday instead of Tuesday.

THURSDAY:

5 Minutes—Windsprints and dashes.
20 Minutes—Backs—spinning and zigzag drills and offensive ball-handling, footwork, etc.
10 Minutes—Linemen—pulling out, ten defensive tactics.
20 Minutes—Dummy and charger-blocker, alternating.
15 Minutes—Punting, receiving, kick-off and place kicking practice, linemen down under.
10 Minutes—One-on-one drill.
10 Minutes—Two-on-one drill.
15 Minutes—Blocking on apron and open field.
15 Minutes—Tackling, five-man drill.
15 Minutes—Offensive plays, 30 minutes if a game is to be played on Saturday.
20 Minutes—Scrimmage if no game is scheduled for Saturday.

FRIDAY:

5 Minutes—Windsprints and dashes.
30 Minutes—Dummy and charger-blocker, alternating.
20 Minutes—Review of the first opponent, information, offensive and defensive strategy planned.
30 Minutes—Offensive plays.
Finish—One spirited lap.
If no game is scheduled for the week end, practice should be finished as follows:
40 Minutes—Scrimmage.
Finish—One spirited lap.

For less skin irritation—
for more quality...choose

BIKE[®]

TRAINERS TAPE

Less Skin Irritation. Repeated clinical studies show that *BIKE* Trainers Tape causes a minimum of skin irritation. In fact, the most recent report shows that *BIKE* Tape causes significantly less irritation than the other popular brands tested.*

This is an important fact for you. It means that when you choose *BIKE* you can count on its superior freedom from irritation factors. You can use *BIKE* Trainers Tape with confidence.

But there are other characteristics of a really good Trainers Tape like *BIKE* that are important to you.

More Quality. *BIKE* Tape has "tack" . . . it sticks firmly under light pressure. It "stays stuck." It goes on smoothly without wrinkling. It has the right body for maximum protection. And *BIKE* Tape is easy to remove, leaving no sticky adhesive material on the skin.

So choose *BIKE* for Trainers Tape quality you can rely on.

*Free copy of report available upon request

THE BIKE WEB COMPANY

2500 S. DEARBORN STREET, CHICAGO, ILLINOIS



.....COACHING SCHOOLS

BELOIT COLLEGE

Beloit, Wisconsin June 13-16

Courses—Basketball.
Staff—Dolph Stanley.
Information—The enrollment in this school is limited to 25, and all participate.
Director—Dolph Stanley, Beloit College, Beloit, Wisconsin.

CALIFORNIA WORKSHOP

San Luis Obispo, Calif. Aug. 6-17

Courses—Football, basketball, baseball, track, physical education, etc.
Staff—John R. Wooden, Brutus Hamilton and others.
Director—William Lopez, California Polytechnic College, San Luis Obispo, California.

COLBY COLLEGE

Waterville, Maine June 14-16

Courses—Football and basketball.
Staff—Clarence "Chief" Boston, Henry Iba.
Information—Tuition \$17.50 does not include room and board. Average cost of room \$1.75 per day, board \$2.00 to \$3.00 per day.
Director—Ellsworth W. Millett, Box 477, Colby College, Waterville, Maine.

See advertisement page 48 May

COLORADO H.S. COACHES ASSN.

Denver, Colorado Aug. 21-25

Courses—Football, basketball, baseball, and track.
Staff—Ray Eliot, Jack Gardner, others to be selected.
Information—Tuition \$5.00 for Colorado coaches, \$10.00 for out-of-state coaches. Average cost of room \$5.00 and board \$3.00 per day.
Directors—N. C. Morris, Don Des Combes and Edward Flint, 1532 Madison Avenue, Denver 6, Colorado.

See advertisement page 54 May

COLORADO, UNIV. OF

Boulder, Colorado June 18-23

Courses—Football, basketball, baseball and track.
Staff—Lynn Waldorf, Dal Ward, Bebe Lee, Frank Potts and Frank Prentup.
Information—Tuition \$10.00. Average cost of room 75 cents and board \$1.75 per day. Courses for B.S. and M.S. degrees are offered during regular terms: June 18-July 20 first term; July 23-August 24 second term.
Director—Harry G. Carlson, University of Colorado, Boulder, Colorado.

CONNECTICUT, UNIV. OF

Storrs, Connecticut Aug. 20-23

Courses—Coaches clinic.
Staff—To be announced.
Information—Tuition \$10.00. Tuition in-

cludes room and meals for C.A.I.C. members. Approximate cost of room \$2.50 and board \$2.10 per day for non-members.
Director—J. O. Christian, University of Connecticut, Storrs, Connecticut.

EDINBORO COACHING SCHOOL

Edinboro, Pennsylvania Aug. 7-10

Courses—Football.
Staff—Joseph Bach and Len Casanova.
Information—Sponsored by Northwestern Pennsylvania Coaches Association. Tuition \$16.00 for members, \$21.00 for non-members. Does not include room and board. Average cost of room \$.50c and board \$2.00 per day.
Director—Jim Hyde, Academy High School, Erie, Pennsylvania.

FLORIDA A & M COLLEGE

Tallahassee, Florida June 18-23

Courses—Football and basketball.
Staff—Eddie Hurt, "Chuck" Mather, Andy Gustafson, Florida A. & M. coaching staff, others to be announced.
Information—Tuition, room and board, \$20.00.
Director—"Jake" Gaither, Florida A. & M. College, Tallahassee, Florida.

ILL. NORMAL-WESTERN C.S.

Normal, Ill. June 12-14

Courses—Football, basketball and track.
Staff—Paul Bryant, Pete Newell, others to be announced.
Information—Tuition free. Single rooms \$2.00 to \$4.00 per day; double rooms \$4.50 to \$6.50 per day; student rooming houses available at \$1.50 per day.
Directors—Howard J. Hancock, Illinois State Normal University, Normal, Illinois and Ray Hanson, Western State College, Macomb, Illinois.

SOUTHERN ILLINOIS UNIV.

Carbondale, Illinois Aug. 20-22

Courses—Football and basketball.
Staff—Paul Bryant and Forrest Anderson.
Information—Tuition is free and average cost of room is \$2.00 and board \$3.00 per day.
Director—Glenn "Abe" Martin, Southern Illinois University, Carbondale, Illinois.

INDIANA BASKETBALL SCHOOL

Logansport, Indiana July 23-25

Courses—Basketball.
Staff—"Peck" Hickman, E. N. Case, Cliff Wells, Gay Kintner, Warren Scholler, Kenneth Norris and E. S. Hickey.
Information—Tuition \$12.00—includes set of notes.
Director—Cliff Wells, Tulane University, New Orleans, Louisiana.

See advertisement page 47

KANSAS, UNIV. OF

Lawrence, Kans. June 11-Aug. 4

Courses—Advanced football, advanced basket-

ball, athletic training, regular physical education courses.

Staff—J. V. Sikes, Forrest C. "Phog" Allen, staff physical education instructors.
Information—Regular summer session fees.
Director—Henry A. Shenk, Chairman Dept. of Physical Education, University of Kansas, Lawrence, Kansas.

LOGAN'S TRAINING CLINIC

Pepperdine College
Los Angeles, Calif.

Courses—All phases of training.
Staff—Roland "Kickapoo" Logan, Dr. William Allen, Dr. Harvey Billig, Mr. Don Gill.
Information—Tuition \$12.50.
Director—Student Health Department, Pepperdine College, Los Angeles, California.

LOUISIANA H.S. COACHES ASSN.

Baton Rouge, Louisiana June 6-8

Courses—Football, basketball, track and training.
Staff—Frank Howard, Don Faurot, Thomas Haggerty, Gaynell Tinsley and L.S.U. staff.
Information—Tuition for state high school coaches \$2.00 and state college coaches \$5.00. For out-of-state high school coaches \$5.00 and out-of-state college coaches \$10.00. Room is free. School will sponsor an All Star game.
Director—Woodrow Turner, 333 Wall Street, Columbia, Louisiana.

MICHIGAN, UNIV. OF

Ann Arbor, Michigan Dates below

Courses—Athletic Coaching and Administration, June 25-July 6. Elementary School Physical Education, June 25-July 6. Safety Education, July 9-20. Youth Hostels, July 23-August 3.
Staff—Members of the University Coaching Staff.
Information—A course designed to combine theory and practice.
Director—Office of the Summer Session, University of Michigan, Ann Arbor, Michigan.
See advertisement page 56 May

MONTANA UNIVERSITY

Missoula, Montana July 23-27

Courses—Football, basketball, track.
Staff—Bowden Wyatt, Jack Friel and Harry Adams.
Information—Tuition \$10.00. Average cost of room \$1.50 per day.
Director—Clyde W. Hubbard, University of Montana, Missoula, Montana.
See advertisement page 57 May

NEBRASKA COACHING SCHOOL

Univ. of Neb., Lincoln Aug. 13-16

Courses—Football and basketball.
Staff—Harold "Red" Drew, Adolph Rupp, Ray O. Duncan and University of Nebraska staff.
Information—Sponsored jointly by N.H.S.A.A. and University of Nebraska
Director—O. L. Webb, First National Bank Building, Lincoln, Nebraska.

DIRECTORY

NEW YORK BASKETBALL SCHOOL

Huntington, New York Aug. 22-24

Courses—Basketball.

Staff—Forrest Anderson, Art Beckner and Hal Bradley.

Information—Tuition \$10.00 does not include room and board. Average cost of room \$3.00 and board \$3.00 per day.

Director—John E. Sips, R. L. Simpson High School, Huntington, New York.

See advertisement page 54 May

OHIO H.S. COACHING SCHOOL

H. S., Middletown, Ohio Aug. 7-11

Courses—Football.

Staff—Paul Bryant, Charlie Caldwell, Burt Ingwersen, Sid Gillman, Woody Hayes.

Information—Sixth annual coaching school sponsored by the Ohio High School Football Coaches Association.

Director—Glenn Ellison, High School, Middletown, Ohio.

See advertisement page 49

OKLAHOMA COACHES ASSN.

Oklahoma City, Okla. Aug. 13-17

Courses—Football and basketball.

Staff—Ray Wolfe, Murray Warmath, basketball staff to be selected.

Information—Tuition \$5.00 does not include cost of room and board. Average cost of room is \$2.50 and board \$3.00 per day.

Director—Clarence Breithaupt, 3420 N. W. 19th Street, Oklahoma City, Oklahoma.

OREGON, UNIV. OF

Eugene, Oregon July 9-20

Courses—Football, basketball, baseball, track.

Staff—Ray Eliot, Jim Aiken, Tippy Dye, John Warren, Don Kirsch, Bill Bowerman.

Director—Dean P. B. Jacobson, School of Education, Dept. 5, University of Oregon, Eugene, Oregon.

See advertisement page 57 April

EASTERN PA. COACHES ASSN.

East Stroudsburg, Pa. June 18-22

Courses—Football, basketball, wrestling and training.

Staff—Charles Caldwell, Douglas C. Walker, Charles Engle, Sever Toretti, Everett Case, Charles Speidel and Tom Floyd.

Information—Tuition \$35.00 for Pennsylvania coaches, \$38.00 for out-of-state. Tuition includes room and board.

Director—Marty Baldwin, Box 109, Stroudsburg, Pennsylvania.

PENN STATE COL.

State College, Pa. June 12-Aug. 31

Courses—Specialized courses in health education, physical education, recreation, and athletics, including one week courses in the coaching of various sports.

Information—Request catalog. Instructional fees and living expenses are moderate.

Director—Director of Summer Sessions, Room 104-B Burrowes Building, Pennsylvania State College, State College, Pennsylvania.

See advertisement page 55 April

SO. CAROLINA COACHES ASSN.

Columbia, South Carolina Aug. 5-10

Courses—Football and basketball.

Staff—Frank Howard, Wally Butts and Adolph Rupp.

Information—Tuition for members \$7.50, non-members \$15.00. Room is free and board approximately \$2.00 per day.

Director—Harry H. Hedgepath, 1623 Harrington Street, Newberry, South Carolina.

See advertisement page 55 May

SOUTH DAKOTA ATHLETIC ASSN.

Huron, South Dakota Aug. 14-17

Courses—Football, basketball and training.

Staff—To be announced.

Information—Tuition free. Average cost of room \$1.00 and board \$3.00 per day.

Director—R. M. Walseth, Box 203, Pierre, South Dakota.

SPRINGFIELD COLLEGE

Springfield, Mass. July 9-Aug. 11

Courses—Football, basketball and track.

Staff—Len Watters, Everett Dean and Carl Olson.

Information—Write Director of Admissions for summer session bulletin.

Director—Director of Summer Session, Springfield College, Springfield 9, Massachusetts.

See advertisement page 52 May

TEXAS H.S. COACHES ASSN.

San Antonio, Texas July 30-Aug. 4

Courses—Football (T and single wing), basketball, baseball, track, training and public relations.

Staff—Frank Howard, C. McMillan, Paul Bryant, Carney Laslie, Forrest Anderson, Cliff Wells, Alex Hooks, Frank Anderson, Eddie Wojewicki and Morris Franks.

Information—Tuition \$12.00 for members, \$15.00 for non-members and high school players, \$25.00 for sporting goods salesmen (4 for each \$25.00). Tuition does not include room and board. Average cost of room \$3.50 and board \$3.00 per day.

Director—L. W. McConachie, 2901 Copper Street, El Paso, Texas.

See advertisement page 48

UTAH STATE COACHING SCHOOL

Logan, Utah June 5-9

Courses—Football and basketball.

Staff—Bowden Wyatt and John Wooden.

Information—Tuition \$10.00. Average cost of board and room per day \$4.00.

Director—John Roning, Utah State Agricultural College, Logan, Utah.

See advertisement page 50

VIRGINIA STATE COLLEGE

Petersburg, Virginia July 16-21

Courses—Football and basketball.

Staff—Paul Bryant, Dick Colman, Everett Case and Barney Wilson.

Information—Tuition to be announced. Room and board \$3.00 per day.

Director—S. R. "Sal" Hall, Virginia State College, Petersburg, Virginia.

See advertisement page 46

WASHINGTON H.S. COACHES

Spokane, Washington Aug. 6-11

Courses—Football, basketball and baseball.

Staff—Carl Snively, Forrest Anderson and Joe Devine.

Information—Tuition free to members and \$10.00 for non-members which does not include room and board.

Director—A. J. Lindquist, 3215 East Mercer, Seattle 2, Washington.

See advertisement page 55 May

WEST VIRGINIA UNIVERSITY

Morgantown, West Virginia June 6-July 22

Courses—Football, basketball, track, wrestling and athletic administration.

Staff—G. Ott Romney, Bud Wilkinson, Red Brown, Art Smith, Steve Harrick and Art Lewis.

Information—Tuition is \$5.00 per credit hour for in-state residence, \$7.00 for out-of-state residence. Courses carry one to six graduate hours.

Director—G. Ott Romney, West Virginia University, Morgantown, West Virginia.

WISCONSIN H.S. COACHES ASSN.

University of Wisconsin Aug. 13-17
Madison, Wisconsin

Courses—Football, basketball, baseball, track and wrestling.

Staff—Don Faurot, Ivy Williamson, Bud Foster and Jack Gardner.

Information—Average cost of room is \$1.00 to \$1.50 and board \$2.00 per day.

Director—Harold A. Metzen, 1809 Madison Street, Madison, Wisconsin.

See advertisement page 58 May

WISCONSIN, UNIV. OF

Madison, Wisconsin June 25-Aug. 17

Courses—Coaching problems in various sports, elementary and secondary physical education, methods and curriculum, conditioning and health education, recreation, organization and administration, measurement and research studies.

Staff—University of Wisconsin staff and visiting instructors.

Information—Request graduate catalog for requirements for graduate work leading to a master's degree. For tuition and living expenses write the director.

Director—Director of Summer Session, University of Wisconsin, Madison, Wisconsin.

See advertisement page 59 March



in new athletic uniforms

Dazzling!— is the word for these hand-some fabrics. Fluorescent colors make "shining lights" of every member of the team. Coaches all over the country are counting on Kahn for uniform fabrics that assure a brilliant performance.

If you're looking for quality—
look for the KAHN label

ARTHUR KAHN CO., Inc.

444 Fourth Ave., New York 16, N. Y.

FOOTBALL AND FALL SPORTS

H. & R.

DRY LINE MARKERS
ACCLAIMED AT THE N.C.A.A.
AT SAN FRANCISCO

- ★ Force Feed—Instant Shutoff—30 pound capacity.
- ★ Easy to fill and operate
- ★ No Brushes or Screens to clog

**SAVES TIME
ELIMINATES**

1. Wet Mixture
2. Mussy Washing
3. Material Waste

Send to
Dept. H. for booklet on four other models
H. & R. MFG. CO., LOS ANGELES 34, CALIF.

National...

**THE WORLD'S
FINEST GYM MAT**



... like hundreds of coaches and officials throughout the country using National Gym mats, you'll agree on National—"the world's finest gym mat."

Send for circular No. 25D today!

NATIONAL SPORTS EQUIP. CO.
1415 MARQUETTE AVENUE, ST. LOUIS, MO.

Idaho State Coaches Assn. Coaching School

July 30-Aug. 3 Boise, Idaho

ALL STAR BASKETBALL GAME
ALL STAR FOOTBALL GAME
One hour approved credit.

FOOTBALL

WES FESLER, Minnesota

BASKETBALL

HENRY IBA, Oklahoma A. & M.

BASEBALL

JOE DEVINE, N. Y. Yankees

TRAINING

FRANK CRAMER

TUITION, \$15

For complete information write:

L. L. PATTERSON

South Jr. High,

Boise, Idaho

ALABAMA COACHING SCHOOL

University, Alabama Aug. 13-17

Courses—Football, basketball and training
Staff—Bill Glassford, Forrest Anderson, C. E. Barrett and Alabama coaching staff.

Information—Tuition is free.

Director—H. D. Drew, University of Alabama, University, Alabama.

IDAHO COACHES ASSN. C. S.

Boise, Idaho July 30-Aug. 3

Courses—Football, basketball, baseball and training.

Staff—Wes Fesler, Henry Iba, Joe Devine and Frank Cramer.

Information—Tuition \$15.00.

Director—L. L. Patterson, South Junior High School, Boise, Idaho

See advertisement this page

NORTHERN ILL. TCHRS. COLL.

DeKalb, Illinois July 30-31

Courses—Football and basketball.

Staff—L. R. Meyer and Everett N. Case.

Information—Tuition is free.

Director—George G. Evans, Director of Physical Education, Northern Illinois State Teachers College, DeKalb, Illinois.

KANSAS H.S. ACTIVITIES ASSN.

Topeka, Kansas Aug. 20-24

Courses—Football, basketball, six-man football and training.

Staff—Wes Fesler, Don Faurot, Jack Gardner and Vadal Peterson.

Information—Tuition is \$10.00 which does not include room and board.

Director—E. A. Thomas, 306 New England Building, Topeka, Kansas.

NORTHERN MICHIGAN C.S.

Marquette, Michigan Aug. 6-8

Courses—Football and basketball.

Staff—Stewart Holcomb, Branch McCracken, Guy Houston and Lester Ehrbright.

Information—Tuition \$10.00, includes board and room.

Director—C. V. Money, Northern Michigan College, Marquette, Michigan.

NEW YORK STATE C.S.

Hamilton, New York Aug. 20-25

Courses—Football, basketball, baseball, track, six-man football, tennis, golf and soccer.

Staff—H. D. "Red" Drew, Sid Gillman, Len Watters, Forrest Anderson, Ben Carnevale, and Bill Jeffrey.

Director—Philip J. Hammes, Proctor High School, Utica, New York.

See advertisement page 45

VA. HIGH SCHOOL LEAGUE

Williamsburg, Virginia Aug. 13-15

Courses—Football, basketball, baseball, track, scouting and training.

Staff—George Barclay, Frank Moseley, B. E. Wilson, J. C. Chandler, Lou Onesty, Tom Nugent, L. A. Simonson and Gus K. Tebell.

Information—Tuition \$3.00 for Virginia coaches; \$10.00 for out-of-state coaches.

Room and board approximately \$3.00 per day

Director—Howard R. Richardson, Box 1487, University Station, Charlottesville, Virginia.

MORIMODEL

Fullview Glass Banks

1. Safe rigid steel frames grip glass on all sides 1 3/4 inches.
2. No beveled edges. All glass cut with square edges to prevent breaks.
3. Safety bracket secures goal to lower edge of frame.
4. Orange porcelain enameled goals and stenciled marking on the glass. No repainting.
5. Replace any rectangular or fan shaped bank on any support.
6. Deliver complete unit or frames for ease in installation at proper height.
7. Install on swing-up supports forward or backward.
8. Proven merit in professional and college play for six years in this and foreign countries.

Manufacturers of the famous "Morimodel" fieldhouse backstops (Pat. No. 2553105) with lever action jacks for quick removal from the fieldhouse.



DICK MOREY, INC. 628 Washington St. ABINGTON, MASS.

How to Have PERFECT GYM FLOORS!

PERMA-SEAL Made of Tung Oil and Phenolic Resins. Fills and seals the floor with a non-porous, satin-like shock-proof surface that cuts floor upkeep costs to a fraction. Easily applied with lamb's wool applicator — non-streaking — odorless — low in cost — economical to use.

Approved for heavy duty durability by Maple Flooring Manufacturers Association.

PERMA-GYM-SEAL Formulated of Bakelite Resin and Tung Oil. Gives a non-slip, quick-stop, fast-start, transparent, resilient surface which diffuses light. Won't crack or break up — not affected by alkali, most acids, oil, water, grease, or body perspiration — easily applied — ideal for all wood, linoleum or cork floors.

Approved by Maple Flooring Manufacturers Association.

SKIDPROOF Eliminates slipping. Contains no wax. Dries quickly to a scuff-proof, hard bright gloss that outlasts wax 3 to 5 times. Won't wash off, crack or check. Odorless. Has no chemical reaction on wood, linoleum, rubber, asphalt, terrazzo or tile floor. One gallon covers 2000 square feet — low in cost — easy to use.

Tested and approved by Underwriters Laboratories.



Seal the pores of your gym floor with Perma-Seal.

1 Actually becoming a part of the wood, Perma-Seal penetrates every pore of the floor to form a hard resinous surface that prevents attack from wear, dirt, stains and moisture, and keeps your floors new indefinitely.

Give them a high-gloss, durable surface with Perma-Gym-Seal.

2 Providing the toughest surface finish known, Perma-Gym-Seal is like a coat of resilient armor that resists rubber-burns, scuffing, oil, alcohol, acids, sub-zero temperatures and boiling water.

Keep them beautiful, shining and safe with Skidproof.

3 An emulsified plastic top maintenance finish, Skidproof protects and preserves against wear and surface damage, gives floors an easy-to-maintain, long-wearing safety surface that guards against dangerous slips and falls.

Write on school letterhead for FREE informative, brochure that tells how to keep floors new, safe, beautiful,

CON-SOL
Products

CONSOLIDATED LABORATORIES, DIV.
CONSOLIDATED CHEMICAL LABORATORIES, INC.
1470 S. VANDEVENTER... ST. LOUIS 16, MO.

For Dependable and Quality Reconditioning of Athletic Equipment from head to toe

- Baseball
- Track
- Lacrosse
- Basketball
- Football
- Hockey
- Soccer

Send it to RALEIGH

SPORTS GEAR REBUILT BY THE RALEIGH
FACTORY INSURES BETTER PLAY,
LONGER, AT LOWER COST.

At Raleigh, reconditioning means REBUILDING. "Worn out" athletic equipment gets a surprising reconstruction that gives it a second useful life. At the Raleigh factory we use the same fine skills, long experience and modern machines that make the Raleigh Quality Line of New Sports Equipment famous. Your used gear is thoroughly inspected, cleaned, sterilized and rebuilt inside and out. Your equipment lasts longer and your athletic programs cost less. You get a double return on your original equipment investment!

→ **Yes! We clean and repair those
Band and Cheerleader Uniforms**

"If it's from Raleigh, it's Right!"

RALEIGH Athletic Equipment Corp.
New Rochelle, N. Y.

From Here and There

(Continued from page 4)

standings and ninth in the defensive standings. Maryland's percentage on field goals was 39.8, Minnesota led the free throw percentages with 71.6 and Texas A. & M. led the team defense standings with a 44.0 percentage.

Ball-Handling for the Backfield

(Continued from page 12)

inches apart. The hands are held steady and at a point of about waist high. The fullback will push the point of the ball firmly in his hands.

The third type of exchange is used in connection with the T formation, which we employ some here at Michigan State. The quarterback in giving the ball to another back slides it across the man's waistline. The man receiving will raise his near elbow and the far forearm will be forming a shelf for the ball to rest on. If the ball is to be retained, the man receiving will clamp it with both forearms and the fingers over the points of the ball. On the other hand, if the quarterback is making a fake to that back, he can push the ball across the beltline and out again without much chance of having it hooked out of his grasp.

We employ several group drills for backs, which stress these various fundamentals, and the backs are watched carefully in their polish work, and in executing plays while working in teams.

Poor ball-handling is usually the result of carelessness, tenseness or the lack of the proper work on fundamentals.

Overall Offense

(Continued from page 5)

greatest technicians that we have seen.

The right halfback spot should have a good blocker, runner and it would help the offense a great deal, if he could pass.

It will be noticed in Series B we are using the off-tackle spinner play with the ball going to the fullback. He spins and gives to the tail. There is a lead post block on the tackle and the quarterback blocks the end out. The off running guard and the inside running guard lead the play. This is

probably the most powerful play found in the single wing. There are occasions where the fullback spins and fakes to the tailback and also the wingback. Usually the defense does not know which one of the three has the ball. That is the general idea of the spin series.

One of the most popular series in the past twenty years has been the one that was originated by Bernie Bierman, former coach of Minnesota, the buck lateral series. Inasmuch as we worked under Bernie Bierman in 1932, 1933 and 1934 we have learned to respect this series and have put it in here at Michigan State. See Series C. There are a great many single wing teams, who use this particular series where the ball goes to the fullback and the fullback keeps or he gives to the quarterback and, as mentioned before, we have used a buck lateral passing series from this. The next one is the fullback series where he hits direct and next the complete series where the tailback will hit direct through all of the offensive holes. Another good series off the single wing is where the ball goes directly to the tailback and he gives or fakes to the fullback.

There are good possibilities of having flankers and men in motion off the single wing and it is our feeling that a coach can do almost the same things off the single wing as he can off the T formation. It so happens that there are a number of convincing features of the T, but inasmuch as we have been brought up under the single wingback we are going to teach what we know and have faith in.

Line Play

(Continued from page 10)

one to take on a trap block of this nature.

Check Blocking at the Line

We use two types of check blocks depending on the type of defensive play of the opposing lineman. If the defensive man is coming in strong consistently, we will use a high shoulder block always stepping into the defensive man with the near foot, getting contact first and then getting position on the second step by placing the body between the defensive lineman and the path of the ball-carrier. If the defensive lineman is hitting and sliding, we go out at him and hook his near knee and crab block on all fours to try to pin him at the line of scrimmage and not let him

IN FIELD OR GYM, KEEPS YOU IN TRIM

OLYMPIC CHAMPION

APEX No. 1

*The Balanced Action
Supporter*



U. S. Patent RE. 23,334

THE **O-C** MANUFACTURING CO., LITTLE FALLS, N.J.
Quality Athletic Supporters Since 1908



New terrazzo lobby in \$1,700,000 Field House is Hillyard-treated for permanent beauty and easy maintenance. Terrazzo during construction for slow, hard-as-flint curing. Once-Seal for a rare beauty finish. Super Hil-Tone for daily maintenance.



Gleaming gymnasium floor in Field House guaranteed non-skid non-glare play is sealed with Hillyard Wood Primer, coated with Star Gym the finish for champions now in use on 15,000 gym floors. Needs only occasional Super Shine-Ali cleaning.

HILLYARD FLOOR CARE in the BLUEPRINTS at the RICE INSTITUTE

This recently completed field house is an excellent example of the way functional floor design, coupled with proper Hillyard treatment materials, is meeting present educational needs for beautiful floors that BASICALLY assure future, low cost maintenance.

From blueprint planning, through every stage of construction, architects, flooring contractors and school planners relied freely on the counsel of the Hillyard Maintainer in the Texas territory. Chose only those Hillyard products specialized for the type of floor.

Countless schools, universities, clubs, factories, institutions, hotels, hospitals for many years have relied on approved Hillyard Care. We'd like to show you its cost-saving advantages.

OUR FLOOR EXPERTS WILL HELP YOU . . .

Whether you are planning a new building, remodeling, or "dressing up" an old one—our experienced Maintainers are at your service. It is wise to get their helpful suggestions BEFORE you act. Advice is FREE.

... on your staff not your payroll



St. Joseph, Missouri

Branches in Principal Cities

WRITE FOR CURRENT LITERATURE TODAY

Hillyard Chemical Co.

St. Joseph, Mo., Dept.

Please send me FREE current catalog information on approved Hillyard Floor products.

Name.....Title.....

Institution.....

Address.....

City.....State.....

**MORE SPECTATOR INTEREST
LESS "SCORING HEADACHES"**
ACCURATE • DEPENDABLE



naden ELECTRIC FOOTBALL SCORE BOARDS

Always on top of the play! Regardless of size there is a NADEN BOARD for your stadium. Featuring the famous NADEN INSTANT-VUE NUMERALS, Naden Electric Football Scoreboards will eliminate guesswork and inaccuracy. Time and production is limited—now is the time to investigate the many advantages of NADEN. WRITE FOR DETAILED CATALOG! NO OBLIGATION.

NADEN AND SONS

WEBSTER CITY, IOWA

NAME _____

ADDRESS _____

CITY _____

STATE _____

slide to the play. We shoot the near arm and shoulder by the defensive lineman and hook his knee. The offensive lineman hooks the defensive lineman with his own leg and crab blocks on all fours.

Downfield Blocking

In downfield blocking, we try to give our men principles to follow. As they round the horn, we tell them either to block the first man to the inside or the first man to the outside. Modern football is a game of speed and movement and a team is only as fast as its interference, therefore, we emphasize speed. We also tell the players to follow the principle in the secondary that they never pass up one man to get to another. They will always block the first man who crosses their path. Regarding the type of block used, we like to have our players go into every downfield block with the intention of using their shoulder, and not go into a cross-body block or leave their feet until after contact has been established. An exception to this would be, if one of the linemen has circled and has good position on a defensive man from his blind side, then he would naturally use a cross-body block.

End-Play

(Continued from page 14)

line. We expect the hook receiver to be tackled quickly and, if he makes an effort to swing back and run around the opponents, he often ends up losing ground.

After drilling against each other, we team up with the defensive backs and try to work the same tactics against them, then we drill on full patterns with the backs. The principle that two receivers should never be close enough together to be covered by one defensive man is emphasized.

Following this we start to work our full patterns against a complete secondary. Some time is spent on the ways to beat holdups. We allow our ends quite a bit of latitude in changing their split on the line of scrimmage. Sometimes we have them use a hard, straight shoulder block on the opponent who is attempting to hold them up, then break to the pass lane. Sometimes we use a quick head and shoulder fake opposite to where we want to run. We try to have a few running plays in our offense that will take advantage of a defensive man who is busy attempting to hold up an end.

Alamo Stadium

(Continued from page 25)

the various sections may be roped off as reserved areas for seating the spectators or special groups such as pep squads. The pipes can be lowered when not in use but reserved areas can be set up easily on short notice and no nailing or bolting is necessary.

Windows are continuous on two sides and one end on the upper level, the glass on the west end being obscure glass. The building is heated by gas fired unit heaters in the various rooms and entrance lobby, and by four large unit heaters over the seating area.

Ample asphalt paved parking area surrounds the building and thus provides off-street parking.

There are twenty-four exit doors in addition to the entrances and these exits permit very rapid clearance of the building.

Glass backboards are used on off-set or overhanging removable single posts set back nine feet from the backboard. The posts are padded with plastic covered mats.

San Antonio high schools play double headers and the four locker rooms are so arranged, two on each side, that teams playing that night dress on opposite sides of the floor.

IN
NEW YORK
The **PLYMOUTH**
offers you
EVERYTHING
in the center of
EVERYTHING

Free radio in every spacious room, Television available to every guest. Air-Conditioned Bar and Restaurant. Garage. Accommodations for 1000

Write for selection of popular
VISITOURS

Packaged all expense-included thrill trips with meals, shows and all the sights of the wonder city.

Leslie L. Paul
Managing Director

HOTEL
Plymouth
West 49th STREET bet.
B'WAY and RADIO CITY

The paired locker rooms are arranged with a shower room between them and the shower room doors may be locked from either side assuring privacy in the locker rooms. Each locker room has a blackboard, bulletin board, trainer's table, lavatory, mirror, hanger strips, benches, and chairs.

Two practice backboards are available in the warm-up area under each side. While the practice area floor is asphalt, it does afford space for passing drills, etc., before a team goes on the floor and this cuts down dead time between the games of double headers. Roll up steel gates are placed so that the concession area, rest rooms, office, officials room, and entrance lobby can be used in connection with the adjoining stadium without giving users access to the playing area and locker rooms.

Playing Floor

The playing floor, 50 feet x 94 feet, has drawn many favorable comments from such coaches as Jack Gray, University of Texas; Cliff Wells, Tulane University; Bill Henderson, Baylor University; Doc Hayes, S.M.U.; John Floyd, Texas A. & M.; and many others. It has an all-wood floor, 74 feet x 114 feet overall, consisting of finished maple, wood sub-floor on wood joists and girders. The foundation consists of concrete footings with cedar posts. The floor has just enough resilience, yet is not dead, and is quite uniform as to ball bounce qualities. Players are unanimous in their praise of the fine qualities of the floor.

Players Benches and Scorers Table

The arrangement of the players benches and timer-scorer table answers rather well the problem of a little privacy for the substitute players, coaches, timer, and scorer and assures ample space for them. A canopy like metal lath and plaster screen affords maximum protection with no obstruction. Drinking fountains are located in each of the two players bench sections. The scorer and timer table is between the two benches, being separated only by rails. Clocks and scoreboards are operated from this table by one control panel.

Exits at the east end of the floor permit the squads to go to and from the playing floor and locker rooms without having to push through crowds. This feature improves game conduct and crowd discipline and avoids all unnecessary crowding, etc., that sometimes brings problems before or after games.

STOP watches

Yours free...

New 1951 catalog of internationally famous Clebar stop watches. Most complete line of stop watches in America ... for every timing purpose.

In use by the foremost industrial firms, laboratories, colleges and athletic competitions.



MAIL COUPON TODAY!

Clebar Stop Watches meet and exceed the rigid specifications of the National Bureau of Standards!

CLEBAR Watch Agency

Clebar Watch Agency
Dept. C 551 Fifth Avenue • New York 17, N.Y.

Please rush me a FREE copy of the new 1951 catalog of the internationally known Clebar Stop Watches

Name.....

Address.....

City.....State.....

NEW YORK STATE Coaching School

Colgate University, Hamilton, N. Y.

August 20 thru 25, 1951

• FOOTBALL STAFF •

H. D. "RED" DREWAlabama
SID GILLMANCincinnati
LEN WATTERSWilliams

• BASKETBALL STAFF •

FORREST ANDERSONBradley
BEN CARNEVALENavy

• BASEBALL STAFF •

BIG LEAGUE TALENT

• SOCCER STAFF •

BILL JEFFREYPenn State

ALSO

TRACK

SIX-MAN FOOTBALL GOLF and TENNIS

For Further Information Write:

PHILIP J. HAMMES, Chairman

Proctor High School

Ulster, N. Y.

FOOTBALL SCOREKEEPING

A Simple Scorebook Leagues and Coaches Are Adopting as the Standard System For Keeping Football Game Records. Price \$2.00 ea.

SHERAR FOOTBALL SCOREBOOK

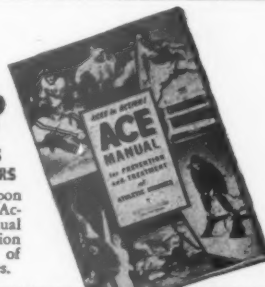
Box 808

Spokane 3, Wash.

Free

TO COACHES AND TRAINERS

Mail this coupon for "Aces in Action," a manual for the prevention and treatment of athletic injuries.



ONLY I-D. MAKES ACE ELASTIC BANDAGES

Becton, Dickinson and Company
Department M-FF
Rutherford, New Jersey

Please send me a free copy of "Aces in Action."

Name.....

Address.....

City.....State.....

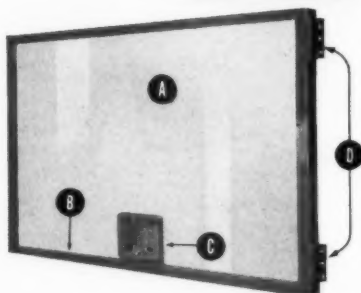
Extra **STRENGTH!**

BUILT IN

NEW **Nurre**

ALL PLATE GLASS

Banks



**Built to resist breakage
in roughest play**

A Fabricated from transparent, heat-strengthened Tuf-flex polished plate glass—3 to 5 times as strong as ordinary plate.

B Glass gripped firmly on all sides by wide, rigid angle iron frame. No beveling—glass has square edges to prevent breakage.

C Extra-large steel face plate, 10" x 9½" x ¼" thick, attached to bank by three widely spaced bolts to provide maximum strength. Only three holes through the glass. Basket mounts securely on four lugs which are correctly spaced to accommodate official basket (No. 960) manufactured by Schutt Mfg. Co., Litchfield, Ill.

D Two steel mounting flanges on each side. Bank is designed for any type suspension. Also available with flanges and loop for post-type installation.

Conform with new N.B.C. Rule
Nurre All Plate Glass Banks are designed to conform with the "all-glass" ruling of the National Basketball Committee for new installations.

Coaches, players, spectators—all praise the permanence and performance of these Nurre Banks. Note, in the features above, how *extra strength is built in!*

Be sure of the best when you buy new banks. Specify Nurre—the national favorite for over 25 years.

FREE! Illustrated bulletin, containing complete details. Send for yours!

THE NURRE COMPANIES, INC.
Bloomington, Indiana

Floor Lighting

The lighting fixtures are on a swivel hanger. There are twenty-five 1500 watt lights giving an average intensity of approximately 68 foot candles with a minimum of approximately 62 and a maximum of approximately 75 foot candles. The mounting height is approximately twenty-five feet above the floor.

Clock and Scoreboard

The gymnasium has two scoreboards and clocks mounted approximately eighteen feet above the playing floor at opposite corners of the court.

A large board, has space for the names of twelve players on each team and has the control panel at the scorer's table between the two teams. This board shows what players are on the floor and the number of fouls on all players. The clocks are ten minute quarter clocks useful for both college and high school games. A standard time clock is mounted on top of the large clock and scoreboard.

Press and Radio Section

The press section is located at the back of one of the center sections. There are two radio booths, glass enclosed, and one public address booth with the press box proper located between the radio and public address spaces. The press box proper is not glassed in in front, although it is so arranged that it can be locked. There is a rest room in the press section. Public address microphone outlets are located at the scorer's table and in the public address booth. The public address unit is a combination public address-radio and record player.

Alamo Stadium — Waste Land Used

Alamo Stadium was built in an abandoned rock quarry which had stood ugly and idle for many years but proved to be an ideal place for a stadium of the type and size needed for public school use. What was once an eyesore is now one of the most beautiful spots in the city. The seating capacity is normally 23,000 and it can be increased by the addition of bleacher seats. The largest crowd accommodated at the stadium was 27,485. It is constructed of reinforced concrete with rock-faced walls.

The stadium is complete with two locker and shower rooms, officials room, office, press box, scout section,

THESE OUTSTANDING COACHES
WILL CONDUCT THE SIXTH ANNUAL

VIRGINIA STATE COLLEGE COACHING SCHOOL JULY 16-21 FOOTBALL

T FORMATION
PAUL BRYANT

SINGLE WING
DICK COLMAN



University of Kentucky
Sugar Bowl Champions

Princeton University
Astute Expert on Line
Quarterbacking

Enjoy a week of relaxation and study on the campus of Virginia State College, Petersburg, Va.
TUITION—\$14.00—One semester hour of graduate credit granted.

ROOM AND BOARD—\$3.00 per day

For complete details write to:

S. R. "SAL" HALL

Director of Coaching School

BASKETBALL

SOUTHERN CONFERENCE RIVALS

EVERETT CASE and BARNEY WILSON



North Carolina State
Winner of 5 Consecutive
Southern Conference
Championships

William and Mary
Handed "Ev" Case His
Only Conference
Defeat in 1950-51



NEW MECHANICAL EARTHWORM IMPROVES ATHLETIC FIELD TURF!

In Great Britain, aerating playing fields is an old practice. Led by the golf course industry, aeration is fast becoming standard procedure over here.

Every school should aerate between playing seasons. Keeps soil porous and grass healthy by increasing root depth. Saves frequent resodding.

Soilaire machines are used by University of Toronto, Ohio State, Illinois, Florida and many other schools. Send for catalog.

SOILAIRE INDUSTRIES,

1200 Second Avenue South, Minneapolis, Minn.



THE ATHLETIC JOURNAL

radio and television booths, public address system, electric clock and scoreboard (operated from the public address booth), concession stands, rest rooms, storerooms, and a caretaker's apartment. A standard 440 yard cinder track surrounds the football field. The field lighting is by General Electric enclosed units type #L-68. There are ninety-nine 1500 watt globes on six steel poles set back of the stands.

It is located adjacent to Brackenridge Park, 363 acres, which includes the San Antonio Zoological Gardens, the Sunken Garden, the Sunken Garden Theatre, Brackenridge Golf Course, polo fields, baseball fields, bridle paths, and numerous other facilities.

Alamo Stadium is unique in that its entire west, northwest and south sides are shaped from a natural hill-slope, thus eliminating the use of supporting beams and columns. Due to this unusual feature, the major portion of those attending the average game can park their cars west of the stadium and walk on level ground through the entrance to the top row (40 rows on the west side) and then down to the seating area, making unnecessary ramps common to the average stadium. The stadium consists of reinforced concrete framework with the entire exterior faced with native stone—all quarried at the site. The east side is of conventional construction and is twenty-three rows high.

The two large locker rooms under the east stands are located near a field entrance, one at each end of the stand so that teams use separate entrances.

Ticket booths are located well away from the turnstile controlled entrances in order to reduce crowding around the entrances to a minimum. The concession stands and rest rooms are also located away from entrances and this helps in handling crowds.

There are twelve large exit gates in addition to the six double entrance gates and two single lane gates. The fourteen entrances are all turnstile controlled. A fifteen-foot walk just inside the outer wall and back of the seats on the west side and south end helps in handling crowds.

The stadium has several acres of paved parking area on two sides.

Forty-four high school and college games are scheduled for the 1951 season.

The Texas High School Coaches Coaching School will be held in San Antonio, Texas, July 29-August 4 and the All Star football game will be played in the stadium on Friday, August 3. The basketball game will be played in the gymnasium on Saturday, August 4, 1951.

for JUNE, 1951

Bleacher & Grandstand Seating



is still available in limited quantities and in accordance with government regulations. However it is indicated that materials for such production will become more critical during the last half of this year.

PLEASE order your '51 needs NOW!

LEAVITT BLEACHER CO.

(Est. 1895)

Urbana, Illinois

THE ORIGINAL

internationally famous
"EM-GE"
BLANK PISTOL
the finest precision-made blank cartridge pistol in the world.



SPECIALY PRICED
AT \$10.50
BLANK CARTRIDGES
\$1.25 PER 100



- HAS SAFETY CATCH AND MAGAZINE WILL NOT ACCEPT BULLETS
- 6-SHOT MAGAZINE FOR RAPID FIRING
- EXTREMELY RELIABLE—THE "EM-GE" FIRES WHEN YOU WANT IT TO
- NO PERMIT REQUIRED

You do not have to accept imitations when you can own the original "EM-GE" at this low price.

Send check or money order direct to:

J. L. GALEF & SON, INC.
85 CHAMBERS ST., DEPT. B-1, N. Y. 7, N. Y.

The Twenty-Third Annual

Indiana Basketball Coaching School

Logansport, Ind. - July 23-25

Eat — Sleep — Dream Basketball
In the Heart of Hoosier Hysteria

THE STAFF

E. S. HICKEY St. Louis U.
"PECK" HICKMAN Univ. of Louisville
E. N. CASE North Carolina State
CLIFF WELLS Tulane
GAY KINTNER Decatur, Ill., H. S.
WARREN SCHOLLER Hamilton, Ohio, H. S.
KENNETH NORRIS Brookston, Ind., H. S.

Movies of 1951 N.I.T. and
N.C.A.A. championship games

Tuition: \$12.00

(includes set of notes)

For full particulars write:

CLIFF WELLS
Tulane University
New Orleans, La.

Scott's UNIQUE DRY COMPOUND Kills Crabgrass



Second successful year coming up for this exclusive product of Scott's Lawn Research. SCUTL defeated Crabgrass on thousands of lawns last year.

NO MIXING—no fussing with sprayer. Apply as it comes from the box.

EASY TO USE from handy shaker box or with a spreader.

SAFE, in recommended usage will not harm lawn grasses, persons or birds.

Stop Crabgrass before it ruins your lawn. At your dealer's or write Scott's, Marysville, Ohio. Cost is nominal. Box—\$.79 and \$1.95 Bag—\$5.85



Fundamental Drills

(Continued from page 32)

ing two lines. These lines should be about five or six yards apart. The ends should throw passes that are high, forcing the receiver to leap high, pull the ball down with one hand and tuck it away in two hands. Other passes should be caught only with finger tip control. It is a good stunt now to place one end in front of another at this relative short distance. Now the passer should try to lob the ball over the opposing end who is waving his arms and doing a great deal to distract the receiving end standing behind him. Another stunt is to have the pass thrown to the front end and let him leap in the air and tap the ball as he would in volleyball. This will give the receiving end in the rear a chance to keep his eyes on the ball and go for a ball that has been tipped. This situation comes up often in actual game situations. The third step that all ends should take up in this pre-practice involves the fakes and footwork for receiving short passes—the button hook, the fake block and slide out to catch the delayed short pass, etc. The arrangement for the practice of Drill No. 25 is found in Diagram 31.

In Drill No. 26, we have a very useful set-up for the defensive backs, to be used at the close of practice, in the place of sprinting these backs as is done so often. We have the coach face the group of backs. At the command, every back sprints forward. On the signal, they sprint backward ten yards. The next signal may call for a sprint of ten yards to the left or right. All this time they are pretending that they are on pass defense duty.

Drill No. 27 finds the coach stationed about ten yards in front of a line of his defensive backs. The coach has eight or ten footballs beside him. He throws a hard pass chest high at the back who must charge toward the ball, catch it and advance it. It is surprising the number of balls that are fumbled by the defensive half-

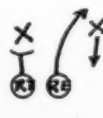
backs who are attempting interceptions on this type of pass. A variation of this drill is to have two lines of backs about seven yards apart and have the coach about ten yards in front of these lines. The coach drills a hard, chest high pass at one of the backs. The front man in the other line attempts to react quickly and become a blocker for the man who intercepted. It is well to have the man making the interception call "oskie" when he catches the ball. This is the old signal that denotes a pass has been intercepted. The interference should be formed immediately.

We feel we have a fine drill in No. 28, shown in Diagram 32, that is vital for the halfbacks to play intelligently against the T formation. Here the defensive halfback takes his normal position. He is instructed to watch the near-side end and near-side tackle. On each maneuver, the end will run into the halfback's territory. The training we wish our halfback to get is this—he should be able to detect quickly whether or not the play is a pass or a run and react accordingly. On each maneuver, the tackle will either block hard into the line or backstep and take on the maneuvers of a protector for the forward passer. If the tackle goes through his pass protection steps, the defensive halfback should give ground back and slightly to his outside, keeping a good pass defense position on the end. Should the tackle charge hard into the line, the halfback should come up fast. This is one cue we like to have the scout pick up concerning the opponent, namely, how do they block for their pass protection. We are especially interested in the tackles. Sometimes this drill is changed if the opponent has the tackles charging hard on pass protection. Then we ask the defensive halfback to watch his near-side end, and out of the corner of his eyes, see the far-side tackle. On 99 per cent of T formation plays, the weak-side tackle will come across that line of scrimmage for a downfield blocking assignment on a running play. If the tackle does not come across, the halfback should give his first attention to the end coming into his territory.

In Drill No. 29, as shown in Diagram 33, we are trying to teach the



DIAG. 31



DIAG. 32

19th Annual TEXAS COACHING SCHOOL

Sponsored by the Texas High School Coaches Association

SAN ANTONIO, TEXAS

July 30 — August 4

Staff FOOTBALL

FRANK HOWARD	Clemson
PAUL BRYANT	Kentucky
C. McMILLAN	Clemson
CARNEY LASLIE	Kentucky

BASKETBALL

FORREST ANDERSON	Bradley
CLIFF WELLS	Tulane

TRACK

FRANK ANDERSON	A. & M.
----------------	---------

BASEBALL

ALEX HOOKS	S. M. U.
------------	----------

TRAINING

EDDIE WOJECKI	Rice
---------------	------

ALL-STAR BASKETBALL

GAME—AUGUST 4

ALL-STAR FOOTBALL

GAME—AUGUST 3

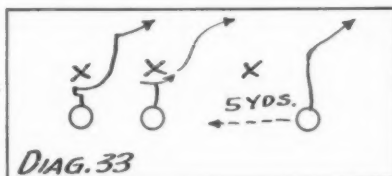
For information write:

L. W. McCONACHIE

2901 Copper St.

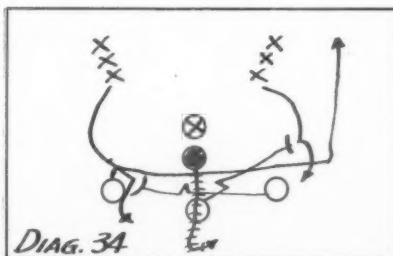
El Paso, Texas

offensive ends three methods of escape when the defense is concentrating on delaying them in their pass-receiving patterns. One method is the use of the head and shoulder fake at the nearest defensive lineman. The second method is to have the end charge the nearby defensive lineman very hard and then release quickly. The third, and surest method, is to set out wide from the offensive tackle. This third method is often used when we know the pass is on, the defense knows a pass is imminent and everyone in the stadium knows a pass is logical. We cannot afford not to have the end get out.



In order to give the backs practice in crossing, faking for the ball and finally blocking the rushing defensive ends in protecting for the passer, we like to use Drill No. 30, shown in Diagram 34. Two lines of rushing ends are used. Coaching points here are as follows: do not let the shoulders get in advance of the toes, keep the feet spread, keep the tail down, the knees bent, keep the eyes glued on the opponent's midsection. Let the rushing end bring most of the pressure while the back maintains the contact and keeps a favorable blocking angle to protect the passer. While working on this drill we teach the rushing ends that it is wiser to fake these backs to the inside and go around them on the outside.

In Drill No. 31, we like to have a full set of defensive backs working to prevent pass completions by an offensive unit consisting of a full back-field, a center and two ends. This drill is used a great deal by most football squads but it is still one of the best. Stimulation may be added by keeping count of the completions and interceptions. The losing unit may be asked to carry all dummies in at the close of practice.



THE STAR PLAYER IN THE FIELD...



SAND KNIT FOOTBALL EQUIPMENT

TOP CHOICE AMONG THE NATION'S OUTSTANDING ATHLETES!

For top quality and dependability, count on SAND KNIT Athletic Clothing. First Choice, because it combines the latest ideas of outstanding coaches and athletes with first quality materials and skillful workmanship. The result, maximum comfort and better appearance for the athlete.

FOOTBALL JERSEYS

Tailored for Wear featuring . . .

- DuPont Nylon
- Cordura Rayon
- Magic Yarns in a Combination of Knit Fabrics with Durene and Cotton

FOOTBALL PANTS

Complete line featuring . . .

- Skinners Nylon Combat
- Cramerton Army Cloths
- Two-Way Stretch Fabric
- 100% Nylon Knit Fabric
- Nylon-Durene
- Many other Fabrics

See Your SAND KNIT Dealer!
Write for 1951 Illustrated Catalog!

SAND KNITTING MILLS CO.

Manufacturers of Exclusive Knitgoods
and Clothing for Athletic Wear

538 South Wabash Ave. Chicago 5

OHIO FOOTBALL

COACHING SCHOOL AND ALL-STAR GAME MIDDLETOWN, OHIO

AUG. 7-11—Game 8:30 P.M. AUG. 11

6th annual coaching school
and game sponsored by

Ohio Football Coaches Association

A complete coverage of both the T formation and the single wing, and a careful analysis of the popular defenses used against each, by five of the finest men in the business.

PAUL BRYANT—Kentucky
Sugar Bowl Champs

CHARLIE CALDWELL—Princeton
Coach of the year

BURT INGWERSEN—Illinois
Famous line coach

SID GILLMAN—Cincinnati
Master of the "Slide Rule T"

WOODY HAYES—Ohio State
A new coach with new ideas

NORTH-SOUTH ALL-STAR FOOTBALL GAME

Ohio's finest fifty facing each other in a contest featuring the single wing against the T. All these boys graduate from high school this June.

For registration or information write:

GLENN ELLISON
High School, Middletown, Ohio

IT'S EASY!

Repair your Football Pads
with

The NUTTING FOOTBALL EQUIPMENT REPAIR KIT



Coaches and Team Managers have waited for this economical and convenient method of making equipment repairs.

Replacements may be made "on the spot" to damaged parts of Shoulder Pads, Hip Pads or Rib Pads. All necessary tools and parts to replace stitching, rivets, leather hinges and lacing eyelet tabs, slides, elastics, straps, belts, "D" rings, etc.

Can also be used to repair baseball and hockey protective equipment.

Packed in sturdy steel tool box, with complete, easy to follow instructions.

Replacement parts available at any time.

Price Complete \$37.50 F.O.B. Berkeley

Order your Kit now or write for full particulars

Charles W. Nutting Co.

849 Contra Costa Ave.

BERKELEY, CALIFORNIA

Dept. A

WASHINGTON

STATE HIGH SCHOOL
COACHES ASSOCIATION

FOOTBALL

BASKETBALL

BASEBALL

CLINIC

at
Whitworth College
Spokane, Washington
AUGUST 6-11

FACULTY

CARL SNAVELY
U. of N.C. — Football
FORREST ANDERSON
Bradley — Basketball

JOE DEVINE
Yankees — Baseball

TUITION
Free To All Members
Non-Members \$10.00

For further information write:

A. J. LINDQUIST

3521 E. Mercer Seattle 2, Wash.

"PAIN-AWAY"

the original

Methyl-Gesic Balm

ENDORSED
by coaches
& trainers

Non-greasy base,
quick warming ac-
tion, especially good
for pre-workout rub-
downs . . . particu-
larly good for pain-
ful muscles and
joints. Pain-Away's
liquid base pene-
trates quicker—
gives quick-
er relief!
Available
2 oz.,
16 oz.



PAIN-AWAY
used with
excellent re-
sults by schools
& colleges ev-
erywhere. Names on
request

Routemen & Dealers Wanted

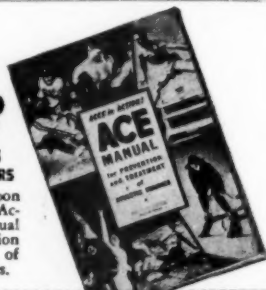
Good Profit Margin

THE NERREN CO. 2680 N. Moreland Blvd.
Cleveland 20, Ohio

Free

TO COACHES
AND TRAINERS

Mail this coupon
for "Aces in Ac-
tion," a manual
for the prevention
and treatment of
athletic injuries.



Becton, Dickinson and Company
Department 51-FB
Rutherford, New Jersey

Please send me a free copy of "Aces
in Action."

Name _____

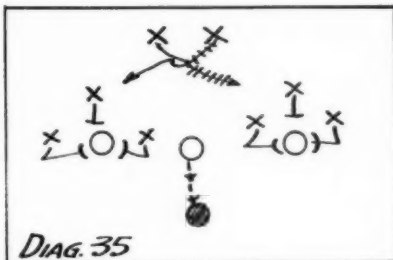
Address _____

City _____

State _____

In Drill No. 32, as shown in Dia-gram 35, we are engaged in a punt return drill. We stress that three men should be able to prevent the offensive ends from getting down the field to cover the kick. The hand-offs and fake hand-offs between the double safeties are emphasized. Needless to say, this drill is rough on life and limb of the offensive ends.

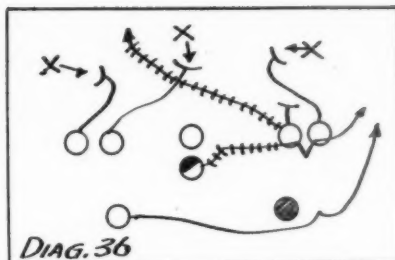
We like to teach our backs the use of such skills as: the change of pace, the cross-over step, the side step, the stiff arm high knee action, pivot- ing and spinning, while they are prac- ticing taking the ball from the quar- terback. In this drill we have each back pass under a stretched inner tube. This causes him to hit low into the line. Then he steps through about six old tire casings for knee action. His next obstacle is a line of six dum- mies that he must weave through while working on the above listed skills.



DIAG. 35

Drill No. 34, illustrated in Dia-gram 36, is one drill that we must not neglect. This is the downfield blocking drill. It is quite similar to game conditions. We have two half-backs and a safety on defense. On the offense, we have a center, two ends, two tackles, a quarterback and two halfbacks. In this drill only hand-offs to either side or end runs to either side are used. This gives us a good opportunity to teach the weak-side end and tackle the skills of down-field blocking. We like to keep the score between the offense and de- fense. The first side making five points wins the game.

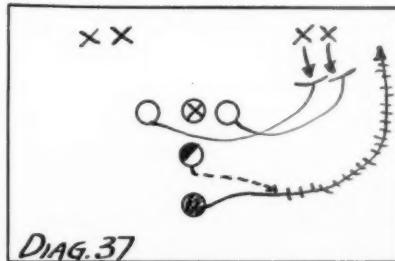
In Drill No. 35, illustrated in Dia-gram 37, we are working with the guards on pulling out to lead inter- ference on sweep plays. We want to make sure that the guards cut down the field as quickly as possible with- out leading the ball-carrier any near- er the sideline than is absolutely nec- essary. They must keep in mind that the trouble will be coming from the center of the field. Notice that we have two defensive halfbacks on both the right and left sides. This is also a good drill to observe and use in teaching broken field tactics to the ball-carrier.



DIAG. 36

In Drill No. 36, we like to print four numbers on the four quarters of a football. (For a full description of the benefits of this practice see the September 1950 issue. Ed.) We ask the backs who are taking pitch-outs to call out the number that is up as the ball approaches the receiver. If the player taking the pitch-out can do this, we know that he is learning to keep his eyes on the ball. This will prevent fumbles on the receiving end of pitch-outs. Since we also ask the quarterbacks to pitch a dead ball on all pitch-outs, the receiving back will soon let him know if the ball is a spiral type so that he cannot read the number. When the receiver of the pitch-out is expecting the ball, it is satisfactory to have another player approaching him and threatening to tag him. This serves as a distracting influence and necessitates deeper con- centration upon catching the pitch- out.

No doubt, a very important factor about most of these drills has been noticed and that is—many of them may be taught effectively and prac- ticed in a physical education class or in a gymnasium. It is surprising how much football the coach can teach his boys in physical education classes in situations where they may make an interesting contest out of the drills. We feel the average class will gain a maximum amount of exercise, taste the spirit of competition and learn the basic skills of football if one day per week throughout the year is spent on fundamental drills for teaching football fundamentals. During these times when spring football practice has been legislated out of the picture in so many states, these drills may prove doubly valuable for use in physical education classes.



DIAG. 37

Pictures and Athletics

WITH the excellent Michigan State series of articles and accompanying illustrations, following the Illinois and Texas Christian series, we conclude a year that has seen us travel over 5700 round trip miles to secure high speed action pictures. Our travels in search of pictures have taken us these many miles, not because we don't have ample subjects in our own backyard, but because as a national publication we feel we owe it to our readers to cover other sections of the country. In other words, we didn't feel we should swing a tight little circle of approximately one hundred miles around our home base of operations and restrict our picture taking to that area.

We have long believed that visual education offers the most efficient method of teaching. For a study of form, we believe high speed sequence action pictures are better than movies in that they permit the eye to travel forward and backward in analyzing the motion, while at the same time keep both images before the eye.

Because of our firm belief in the value of high speed sequence action pictures it is little wonder that we have, this year, carried 77 different strips of 732 sequence pictures which, incidentally, is more than twice that carried in any other coaching magazine.

The interesting thing about pictures is that the picture taking never stops. In our efforts to bring our readers pictures of current athletes we are constantly on the go. With the track season drawing to a close we have just about completed our track pictures for next spring. Our picture plans for the coming school year and the new volume of the Athletic Journal make for a full and complete summer.

In the meantime, our wish for you is happy summer with plenty of golf and fishing, and we hope to see you at some of the coaching schools.

Correction

IN the author's block accompanying Dr. Wesley M. Staton's article entitled "New Approach to Muscle Soreness," we stated, "his findings that muscle soreness can be reduced by the administration of vitamin C . . ." Dr. Staton, in his article states, "Patent acceptance and application of this interesting theory on the basis of the data brought to light thus far is not recommended." Dr. Arthur H. Steinhaus pointed out this discrepancy to us and we certainly do not want to be guilty of starting a vitamin fad in athletics.

COACHES READY REFERENCE SERVICE COUPON

JUNE, 1951

As a service to our readers and for their convenience we list here the advertisers appearing in this issue. Many of the concerns offer free booklets and coaching aids. Simply cut along the perforated rule and mail to:
Service Department ATHLETIC JOURNAL
6856 Glenwood, Chicago 26, Ill.

COMPLETE LINE

MacGregor Goldsmith, Inc., 35	See advertisement
Rawlings Mfg. Co., Cover 2	<input type="checkbox"/> Catalog
Reach, Wright & Ditson, 1, 15	<input type="checkbox"/> Catalog
Spalding & Bros., A. G. 1, 15	<input type="checkbox"/> Catalog
Wilson Sporting Goods Co., 17,	See advertisement

SHOES

Brooks Shoe Mfg. Co., 3,	<input type="checkbox"/> Special school and college catalog
Riddell, Inc., John T., 33,	<input type="checkbox"/> Information
Spot Bilt, Inc., 24,	<input type="checkbox"/> Information

CLOTHING & LETTERING

Kahn Co., Arthur, 40,	<input type="checkbox"/> Information Kahnfast fabrics
Sand Knitting Mills, 49,	<input type="checkbox"/> 1951 illustrated catalog

TRAINERS SUPPLIES

Becton Dickinson & Co., 45, 50,	<input type="checkbox"/> New Ace Manual, "Aces In Action"
Bike Web Mfg. Co., 37,	<input type="checkbox"/> Free, report on Bike Trainers Tape
Chesebrough Mfg. Co., 31,	<input type="checkbox"/> Information Vaseline Sterile Petrolatum Gauze Dressings
Nerren Co., The, 50,	<input type="checkbox"/> Information "Pain-Away"
O. C. Mfg. Co., 43,	<input type="checkbox"/> Information "Olympic Champion" supporters

GYMNASIUM & FIELD EQUIPMENT

Galef & Sons, Inc., J. L., 47,	<input type="checkbox"/> Information "EM-GE" blank pistol
H. & R. Mfg. Co., 40,	<input type="checkbox"/> Free booklet
Leavitt Corp., 47,	<input type="checkbox"/> Information
Morey Dick, Inc., 41,	<input type="checkbox"/> Information
Naden & Sons, 44,	<input type="checkbox"/> Catalog
National Sports Equipment Co., 40,	<input type="checkbox"/> Circular No. 25D
Nissen Trampoline Co., 4,	<input type="checkbox"/> Literature on trampolining
Nurre Companies, Inc., 46,	<input type="checkbox"/> Free illustrated bulletin
Nutting Co., Charles W., 49,	<input type="checkbox"/> Information Nutting Football Equipment Repair Kit

LIGHTING EQUIPMENT

Crouse-Hinds Co., 19,	<input type="checkbox"/> Information
-----------------------	--------------------------------------

FLOOR FINISHES

- Consolidated Laboratories, Inc., ☐ Free Brochure
41,
Hillyard Sales Co., 43, ☐ Catalog
Huntington Laboratories, Inc., ☐ New 1950-51 "Seal-O-San Basketball
21, Coaches Digest". Sent to coaches free.
All others pay 25 cents handling fee.

RUBBER BALLS

- Seamless Rubber Co., Cover 3, ☐ Information Kolite Covered balls

RECONDITIONERS

- Ivory System, Cover 4, ☐ Add name to "Observer" list
Raleigh Athletic Equipment ☐ Information
Corp., 42,

TURF PRODUCTS

- Scott & Sons Co., O. M., 48, ☐ Information "Scutl"
Soilaire Industries, 46, ☐ Catalog

WATCHES & TIMERS

- Clebar Watch Co., 45, ☐ New 1951 catalog

COACHING SCHOOLS

- Idaho State Coaches Assn. ☐ Information
Coaching School, 40,
Indiana Basketball Coaching ☐ Information
School, 47,
New York State Coaching ☐ Information
School, 45,
Ohio Football Coaching ☐ Information
School, 49,
Texas High School Coaches Assn. ☐ Information
Coaching School, 48,
Virginia State College Coaching ☐ Information
School, 46,
Washington State High School ☐ Information
Coaches Assn. Coaching
School, 50,

BOOKS

(Enclose money where required)

- Mosby Co., The C. V., 23, ☐ "Intramural Sports," Means, \$5.75
☐ "Manual for Athletes," Voltmer, \$3.00
☐ "The Intramural Handbook," Voltmer-
Lapp, \$3.00
Sherar Football Scorebook, 45, ☐ Football Scorebook, \$2.00
Coupon will not be honored unless position is stated.

NAME _____ POSITION _____
SCHOOL _____
CITY _____ ZONE _____ STATE _____

INDEX TO ADVERTISERS

Becton Dickinson & Co.	45, 50
Bike Web Mfg. Co.	37
Brooks Shoe Mfg. Co.	3
Chesebrough Mfg. Co.	31
Clebar Watch Co.	45
Consolidated Laboratories, Inc.	41
Crouse-Hinds Co.	19
Galef & Sons, Inc., J. L.	47
H. & R. Mfg. Co.	40
Hillyard Sales Co.	43
Hotel Plymouth	44
Huntington Laboratories, Inc.	21
Idaho State Coaches Assn. Coaching School	40
Indiana Basketball Coaching School	47
Ivory System	Cover 4
Kahn Co., Arthur	40
Leavitt Corp.	47
MacGregor Goldsmith, Inc.	35
Morey Dick, Inc.	41
Mosby Co., The C. V.	23
Naden & Sons	44
National Sports Equipment Co.	40
Nerren Co., The	50
New York State Coaching School	45
Nissen Trampoline Co.	4
Nurre Companies, Inc.	46
Nutting Co., Charles W.	49
O. C. Mfg. Co.	43
Ohio Football Coaching School	49
Raleigh Athletic Equipment Corp.	42
Rawlings Mfg. Co.	Cover 2
Reach, Wright & Ditson	1, 15
Riddell, Inc., John T.	33
Sand Knitting Mills	49
Scott & Sons Co., O. M.	48
Seamless Rubber Co.	Cover 3
Sherar Football Scorebook	45
Soilaire Industries	46
Spalding & Bros., A. G.	1, 15
Spot Bilt, Inc.	24
Texas High School Coaches Assn. Coaching School	48
Virginia State College Coaching School	46
Washington State High School Coaches Assn. Coaching School	50
Wilson Sporting Goods Co.	17

INDEX FOR VOLUME THIRTY-ONE

A

- Allen, George H., Morningside's Quick Kick 31- 8-12
Anderson, Forrest, Play of the Small Pivot Man 31- 3- 8
Appleby, Robert W., Defense Maneuvers of a Pitcher .. 31- 8-24

B

- Bachman, Charles W., The Balanced and Unbalanced Line 31- 8-38
Ball, Watch the 31- 1-50
George Stromgren
Barwis, E. B., Give Your Team a Fighting Spirit 31- 1-36
Baseball: Coaching at First and Third 31- 6-26
James Smilgoff
Baseball, Guess Hitting 31- 8-28
James Smilgoff
Baseball: Inside Practice 31- 5-30
Joseph R. Cooper
Baseball: Pitcher, Defense Maneuvers of a 31- 8-24
Robert W. Appleby
Baseball: Pitching Psychology 31- 6- 8
Carl Boyer
Baseball: Run Those Bases 31- 7- 8
James Smilgoff
Baseball: Stanford Pitching Chart, The 31- 8-20
Everett S. Dean
Basketball: Adapting the Style of Play to the Personnel.. 31- 3-26
Ernest G. Neipp
Basketball: Attacking the Zone 31- 3-40
Roland Rourke
Basketball Championships, 1951 State 31- 8-14
Basketball: Drills and the Pattern Play 31- 4-22
Edward McCluskey
Basketball: Effective Ball Control Tactics 31- 4-28
John W. Bunn
Basketball: End Line Out-of-Bounds Play 31- 4-20
William J. Corcoran
Basketball: Enigma—The Free Throw 31- 5-17
Richard B. Moriand
Basketball: Fast Break, Developing the 31- 3-32
Mack Peyton
Basketball: Fast Break from the Pressing Man-to-Man .. 31- 3-28
Thomas Eckert
Basketball: Fast Break Principles 31- 2-13
Paul C. Moon
Basketball: Fast Break with the Weakside Trailer, The.. 31- 4-24
Stan Ward
Basketball: Fouling Can Be Reduced 31- 3-34
F. M. Wilson
Basketball: Held Ball? Why Not Time Out for 31- 5-34
Thomas Verdell
Basketball: Independent Basketball 31- 5-11
George Sempeles
Basketball: Kentucky Continuity 31- 4- 6
Adolph Rupp
Basketball: Man-to-Man Defense 31- 5-42
Eddie Johnson
Basketball: Mass Basketball 31- 1-46
Willard Smith
Basketball: Modifying the 1-3-1 Zone 31- 5-15
George Henderson
Basketball: Offense Against the Zone 31- 3- 7
Stafford H. Cassell
Basketball: Organization 31- 1-52
James L. Sullivan
Basketball: Out-of-Bounds Plays 31- 3-36
Robert Quiring
Basketball: Photography with a Motion Picture Camera 31- 5-16
L. S. Bennett
Basketball: Play of the Small Pivot Man 31- 3- 8
Forrest Anderson
Basketball: Position Shooting Wins Games 31- 3-38
James P. Box
Basketball: Post Attack, A Variable Single 31- 5-14
J. A. Brown
Basketball: Practice Tips 31- 5-28
Bernard Erdman
Basketball: Pre-Season Planning 31- 2-16
Russ Kaminsky
Basketball: Pressing Zone in Junior High School, The.. 31- 5-38
Larry Saltis
Basketball: Scouts Out 31- 3-50
Theodore J. Campagnolo
Basketball: Screens 31- 3-22
Paul F. Straub
Basketball: Sliding Zone Defense, The..... 31- 4-35
Stafford H. Cassell
Basketball: Stopping the Pivot 31- 4-16
Cliff Wells
Basketball: Three-Phase Basketball Offense, A 31- 4-26
Jay McWilliams
Basketball: Tournament Play, Preparation for 31- 6-10
Ray Eddy
Basketball: Zone, Twilight of the 31- 2-22
Stafford H. Cassell
Bates, Frank A., Are Football Practices Worthwhile? .. 31- 7-24
Beaudry, Charles E., Determining Steps in the 31- 6-12
Broad Jump
Bell, Matty, Walker Punting 31- 2-10
Bennett, L. S., Basketball Photography with a 31- 5-16
Motion Picture Camera
Billett, Ralph E., Save Time and Money 31- 8-34
Blount, Joe M., Introspective Scouting 31- 1-56
Books, New 31- 1-61
Books, New 31- 2-57
Books, New 31- 3-43
Books, New 31- 4-30
Books, New 31- 5-44
Books, New 31- 6-40
Books, New 31- 8-42
Books, New 31- 9-50
Books, New 31-10-36
Box, James P., Position Shooting Wins Games 31- 3-38
Boxing, Class 31- 5-24
Eugene W. Nixon
Boyer, Carl, Pitching Psychology 31- 6- 8
Brown, J. A., A Variable Single Post Attack 31- 5-14
Brown, Jack, Chester County Gymnasium 31- 6-11
Bunn, John W., Effective Ball Control Tactics 31- 4-28

C

Campagnolo, Theodore J., Scouts Out	31- 3-50
Canham, Don, McEwen—Distance Champion	31- 6- 7
Cassell, Stafford H., Twilight of the Zone	31- 2-22
Cassell, Stafford H., Offense Against the Zone	31- 3- 7
Cassell, Stafford H., The Sliding Zone Defense	31- 4-35
Coaching School Directory	31- 8-54
Coaching School Directory	31- 9-32
Coaching School Directory	31-10-38
Coleman, E. P., The Split-T	31- 1-40
College, The Coach Writes Home to	31-10-20
Competitive Program, High School, The	31- 7-28
Cooper, Joseph R., Inside Baseball Practice	31- 5-30
Corcoran, William J., End Line Out-of-Bounds Play	31- 4-20

D

Daugherty, Hugh, Michigan State's Single Wing, Line Play	31-10- 8
Dawson, Lowell, Michigan State's Single Wing, Backfield Play	31-10-12
Dean, Everett S., The Stanford Pitching Chart	31- 8-20
Doherty, Ken, Billy Hayes on Distance Running	31- 7-12

E

Eckert, Thomas, Fast Break from the Pressing Man-to-Man	31- 3-28
Eddy, Ray, Preparation for Tournament Play	31- 6-10
Editorials:	
A Fallacy of Education	31- 1-87
Athletics Are Not All Bad	31- 9-62
Boss or Coach	31- 3-62
Buy Early	31- 7-63
Coaching Security	31- 6-63
Comments On Television	31- 5-22
Expanded Athletic Programs	31- 3-20
Football at Illinois	31- 1-20
Football Coaches' Opinions	31- 8-18
From Whom Do You Buy?	31- 3-20
Lawrence Blaine Icely	31- 1-20
Now, How About the Spectators	31- 2-18
Order M4	31- 5-63
Pan-American Games	31- 7-16
Pictures and Athletics	31-10-51
Spring Football	31- 2-18
Television and Night Football	31- 1-20
The Television Ban	31- 6-18
Thirtieth Anniversary	31- 7-16
Track Literature	31- 8-18
Unionized Athletics	31- 9-22
Edwards, Earl, Michigan State's Single Wing, End Play..	31-10-13
Eliot, Ray, Illinois T Formation	31- 1- 9
England, Forrest W., Fundamental Drills for Teaching Football Fundamentals	31-10-28
Erdman, Bernard, Basketball Practice Tips	31- 5-28

F

Facilities and Equipment: Alamo Stadium-Gymnasium ..	31-10-25
Facilities and Equipment: Chester County Gymnasium..	31- 6-11
Facilities and Equipment: Kentucky's Memorial Coliseum	31- 3-17
Facilities and Equipment: Lehigh's New Gymnasium ..	31- 4-39
Facilities and Equipment: Markers, Build Your Own	31- 1-54
Facilities and Equipment: Whirlpool Bath, Build Your Own	31- 1-54
Fencing, Lesson Plans in Beginning	31- 2-24
Fencing, Officiating Mechanics Recommended for	31- 6-15
Fencing, Technique and Use of the Arms in	31- 3-30
Fletcher, Ralph, Illinois Backfield Play	31- 1-13
Flicker Ball—The Passing Game	31- 2-24
Fogleman, Harry, Suggestions for an Intercollegiate Tennis Program	31- 7-18
Football: Aiken Kneedown Block, The	31- 8- 6
Football: Are Football Practices Worthwhile?	31- 7-24
Football: Balanced and Unbalanced Line, The	31- 8-38
Football: Championship Drills	31- 1-22
Football: Competitive Elementary School Football	31- 2-36
Football: Fighting Spirit, Give Your Team a	31- 1-36
Football: Filming Football, Techniques for	31- 1-74
Football: Fundamental Drills for Teaching Football Fundamentals	31-10-28
Football: Interscholastic in Junior Highs	31- 6-24
Football: High School Offense	31- 7-36
Football: Illinois Backfield Play	31- 1-13
Football: Illinois End Play	31- 1-18
Football: Illinois Line Play	31- 1-12
Football: Illinois T Formation	31- 1- 9
Football: Linebacker, Aids for the	31- 2-10
Football: Linemen, Drills for Junior High School	31- 2-12
Football: Looping, Angle Charging and Gap Plugging	31- 1-32
Football: Michigan State's Single Wing, Backfield Play..	31-10-12
Football: Michigan State's Single Wing, End Play	31-10-13
Football: Michigan State's Single Wing, Line Play	31-10- 8
Football: Michigan State's Single Wing, Overall Offense	31-10- 5
Football: Morningside's Quick Kick	31- 8-12
Football: Motion Pictures for the High School	31- 7-15
Football: Pass Patterns	31- 2- 9
Football: Plan Your Football Practice	31-10-16
Football: Returning the Punt and Kick-Off	31- 9-28

Football: Scouting, Introspective	31- 1-56
<i>Joe M. Blount</i>	
Football: Simplified Rule Blocking	31- 9-18
<i>James A. Perry</i>	
Football: Six-Man Defense	31- 2-42
<i>George L. Henderson</i>	
Football: Six-Man, Option-Flip Plays for	31- 1-28
<i>George L. Henderson</i>	
Football: Six-Man, Quick-Action Offense for	31- 8-26
<i>George L. Henderson</i>	
Football: Six-Man, Winning	31- 8-22
<i>Marvin J. Parr</i>	
Football: Split-T, The	31- 1-40
<i>E. P. Coleman</i>	
Football: Splitting the T	31- 9-36
<i>Arch Steel</i>	
Football: T.C.U. Spread, Backfield Play	31- 9-10
<i>L. R. Meyer</i>	
Football: T.C.U. Spread, End Play	31- 9-15
<i>Othol Martin</i>	
Football: T.C.U. Spread, Line Play	31- 9-14
<i>Allison White</i>	
Football: T.C.U. Spread, Overall Offense	31- 9- 7
<i>L. R. Meyer</i>	
Football: Unorthodox Defensive Tactics	31- 2-28
<i>James A. Perry</i>	
Football: Walker Punting	31- 2-10
<i>Matty Bell</i>	
Football: Winning, Essential Factors for	31- 8-16
<i>H. R. Hastings</i>	
Foti, John C., Television and the High Schools	31- 9-54

G

Garret, Maxwell R., Officiating Mechanics Recommended for Fencing	31- 6-15
Golf Pros and Physical Educators	31- 9-20
<i>Conrad H. Rehling</i>	
Greenich, Duke, Returning the Punt and Kick-Off	31- 9-28
Grieve, Andrew W., Treatment of the Charley Horse ...	31- 7-26
Griffin, Robert, Conditioning the Knee to Avoid Injury ..	31- 1- 6
Grignon, Ted, Drills for Junior High School Linemen ..	31- 2-12
Guyer, Richard W., The Coach Writes Home to College ..	31-10-20

H

Hastings, H. R., Essential Factors for Winning	31- 8-16
Henderson, George L., Optional-Flip Plays for Six-Man ..	31- 1-28
Henderson, George L., Six-Man Football Defense	31- 2-42
Henderson, George L., Modifying the 1-3-1 Zone	31- 5-15
Henderson, George L., Quick-Action Offense for Six-Man Football	31- 8-26
Hill, Elam R., No Guts?	31- 6-22
Hill, Frank, Holland Broad Jumping	31- 6-12
Hill, Jess, Dick Attlesley, World's Fastest Hurdler	31- 5-12
Hockey, How to Beat the Defense in	31- 4-32
<i>Westcott E. S. Moulton</i>	
Hooper, Jerry D., Build Your Own Sideline Markers	31- 5-54

I

Ingwersen, Burt, Illinois Line Play	31- 1-12
Items, New	31- 1-86
Items, New	31- 2-62
Items, New	31- 4-46
Items, New	31- 5-62
Items, New	31- 6-62
Items, New	31- 8-62
Items, New	31- 9-61

J

Johns, Roy, Don't Forget the Press	31- 9-34
Johnson, Eddie, Man-to-Man Defense	31- 5-42

K

Kaminsky, Russ, Pre-Season Planning	31- 2-16
Kaplan, Robert, Lesson Plans in Beginning Fencing	31- 2-24
Kaplan, Robert, The Technique and Use of the Arms in Fencing	31- 3-30
Katchmer, George A., Plan Your Football Practice	31-10-16
Keen, Paul V., Physical Education Today	31- 6-14
Kellam, Claud H., Alamo Stadium-Gymnasium	31-10-25
Kellman, Lou, Techniques for Filming Football	31- 1-74
Kenney, H. E. Flicker Ball—The Passing Game	31- 2-24
King, Robert, Illinois End Play	31- 1-18
King, Tom, The Aiken Knetdown Block	31- 8- 6

L

Langerman, Roland J., High School Vaulting Mistakes ..	31- 7-54
Larkin, Richard A., A Track Meet Clinic	31- 6-17
Lehmann, Harry, Don't Forget Main Street	31- 1-42
Loken, Newton C., Advanced Tumbling	31- 5- 7

M

McCluskey, Edward, Drills and the Pattern Play	31- 4-22
McWilliams, Jay, A Three-Phase Basketball Offense	31- 4-26
Main Street, Don't Forget	31- 1-42
<i>Harry Lehmann</i>	
Martin, Othol, T.C.U. Spread, End Play	31- 9-15
Meier, Magnus, Competitive Elementary School Football ..	31- 2-36
Meyer, L. R., T.C.U. Spread, Backfield Play	31- 9-10
Meyer, L. R., T.C.U. Spread, Overall Offense	31- 9- 7
Miller, Richard I., The Science and Practice of Warming-Up	31- 6-28
Miller, Richard I., The Science and Practice of Warming-Up	31- 7-46
Moon, Paul C., Fast Break Principles	31- 2-13
Moravec, Charles J., Lehigh's New Gymnasium	31- 4-39
Morland, Richard B., Basketball—Enigma—The Free Throw	31- 5-17
Moulton, Westcott, E. S., How to Beat the Defense in Hockey	31- 4-32
Munn, Clarence "Biggie", Michigan State's Single Wing, Overall Offense	31-10- 5
Munn, Clarence "Biggie", Pass Patterns	31- 2- 9
Murphy, Chester W., Teamwork in Doubles	31- 8- 8

N

Neipp, Ernest G., Adapting the Style of Play to the Personnel	31- 3-26
Nixon, Eugene W., Class Boxing	31- 5-24
No Guts?	31- 6-22
<i>Elam R. Hill</i>	

O

O'Connor, Harold, Training the Prospective Record Breaker	31- 5-36
Ode, Sigurd J., Promoting Interest in Track	31- 7- 6
Odeneal, William T., Program for Volleyball Instruction ..	31- 7-30
Owens, Larry, Football Motion Pictures for the High School	31- 7-15

P

Page, Richard, Build Your Own Whirlpool Bath	31- 1-54
Parr, Marvin J., Winning Six-Man	31- 8-22
Perry, James A., Looping, Angle Charging and Gap Plugging	31- 1-32
Perry, James A., Unorthodox Defensive Tactics	31- 2-28

Perry, James A., Simplified Rule Blocking	31- 9-18
Peyton, Mack, Developing the Fast Break	31- 3-32
Physical Education Today	31- 6-14
<i>Paul V. Keen</i>	
Pohndorf, Richard, No Pool But Spartanburg Swims....	31- 9-48
Press, Don't Forget the	31- 9-34
<i>Roy Johns</i>	

Q

Quiring, Robert, Out-of-Bounds Plays	31- 3-36
--	----------

R

Rehling, Conrad, H., Golf Pros and Physical Educators..	31- 9-20
Rideout, Blaine, Injuries to the Neck	31-10-34
Rideout, Blaine, Treatment for External Ankle Sprain..	31- 8-13
Rourke, Roland, Attacking the Zone	31- 3-40
Rupp, Adolph, Kentucky Continuity	31- 4- 6
Ryan, Frank, Shot Put Champions, Jim Fuchs	31- 6-33
Ryser, Otto E., A Brief for Tumbling and Apparatus Work	31- 6-16

S

Saltis, Larry, The Pressing Zone in Junior High School..	31- 5-38
Save Time and Money	31- 8-34
<i>Ralph E. Billett</i>	
Seidler, A. H., Flicker Ball—The Passing Game	31- 2-24
Sempeles, George, Independent Basketball	31- 5-11
Smilgoff, James, Coaching at First and Third	31- 6-26
Smilgoff, James, Run Those Bases	31- 7- 8
Smilgoff, James, Guess Hitting	31- 8-28
Smith, Willard, Mass Basketball	31- 1-46
Soccer-American Style	31- 2- 6
<i>David O. White</i>	
Soccer Strategy	31- 9-38
<i>David O. White</i>	
Staton, Wesley M., New Approach to Muscle Soreness..	31- 9-26
Steel, Arch, Splitting the T	31- 9-36
Steele, Robert L., Aids for the Linebacker	31- 2-10
Straub, Paul F., Screens	31- 3-22
Stromgren, George, Watch the Ball	31- 1-50
Sullivan, James L., Basketball Organization	31- 1-52
Swimming: No Pool But Spartanburg Swims	31- 9-48
<i>Richard Pohndorf</i>	

T

Television and the High Schools	31- 9-54
<i>John C. Foti</i>	
Tennis: Tactical Tips for Tennis	31- 9-30
<i>Louis S. Wheeler</i>	
Tennis: Teamwork in Doubles	31- 8- 8
<i>Chester W. Murphy</i>	
Tennis Program, Suggestions for an Intercollegiate	31- 7-18
<i>Harry Fogleman</i>	
Thomas, E. A., National Honor Roll	31- 5-18
Track and Field: Broad Jump, Determining Steps in the	31- 6-12
<i>Charles E. Beaudry</i>	

Track and Field: Dick Attlessey, World's Fastest Hurdler	31- 5-12
<i>Jess Hill</i>	
Track and Field: Distance Running, Billy Hayes on	31- 7-12
<i>Ken Doherty</i>	
Track and Field: Holland Broad Jumping	31- 6-12
<i>Frank Hill</i>	
Track and Field: McEwen—Distance Champion	31- 6- 7
<i>Don Canham</i>	
Track and Field: National Honor Roll	31- 5-18
<i>E. A. Thomas</i>	
Track and Field: Promoting Interest in Track	31- 7- 6
<i>Sigurd J. Ode</i>	
Track and Field: Record Breaker, Training the Prospective.	31- 5-36
<i>Harold O'Connor</i>	
Track and Field: Shot Put Champions, Jim Fuchs	31- 6-33
<i>Frank Ryan</i>	
Track and Field: Shot Put Champions, Otis Chandler... 31- 6-31	
<i>Jack Weiershauser</i>	
Track and Field: Track Meet Clinic, A	31- 6-17
<i>Richard A. Larkin</i>	
Track and Field: Vaulting Mistakes, High School	31- 7-54
<i>Rolland J. Langerman</i>	
Track and Field: Warming-Up, The Science and Practice of	31- 6-28
<i>Richard I. Miller</i>	
Track and Field: Warming-Up, The Science and Practice of	31- 7-46
<i>Richard I. Miller</i>	
Track in the High Schools	31- 5-19
Track Meet, High School	31- 5-20
Training: Ankle Sprain, Treatment for External	31- 8-13
<i>Blaine Rideout</i>	
Training: Charley Horse, Treatment of the	31- 7- 6
<i>Andrew W. Grleve</i>	
Training: Conditioning the Knee to Avoid Injury	31- 1- 6
<i>Robert Griffin</i>	
Training: Muscle Soreness, New Approach to	31- 9-26
<i>Wesley M. Staton</i>	
Training: Neck, Injuries to the	31-10-34
<i>Blaine Rideout</i>	
Troppmann, Bob, Championship Drills	31- 1-22
Tumbling, Advanced	31- 5- 7
<i>Newton C. Loken</i>	
Tumbling and Apparatus Work, A Brief for	31- 6-16
<i>Otto E. Ryser</i>	

V

Verdell, Thomas, Why Not Time Out for Held Ball?... 31- 5-34	
Volleyball Instruction, Program for	31- 7-30
<i>William T. Odeneal</i>	

W

Walker, Malcolm, Interscholastic Football in Junior Highs	31- 6-24
Ward, Stan, The Fast Break with the Weakside Trailer.. 31- 4-24	
Weiershauser, Jack, Shot Put Champions, Otis Chandler	31- 6-31
Wells, Cliff, Stopping the Pivot	31- 4-16
Wheeler, Louis S., Tactical Tips for Tennis	31- 9-30
White, Allison, T.C.U. Spread, Line Play	31- 9-14
White, David O., Soccer-American Style	31- 2- 6
White, David O., Soccer Strategy	31- 9-38
Williams, Rhea H., The High School Competitive Program	31- 7-28
Wilson, F. M., Fouling Can Be Reduced	31- 3-34

TODAY'S MOST AMAZING SPORTS STORY!

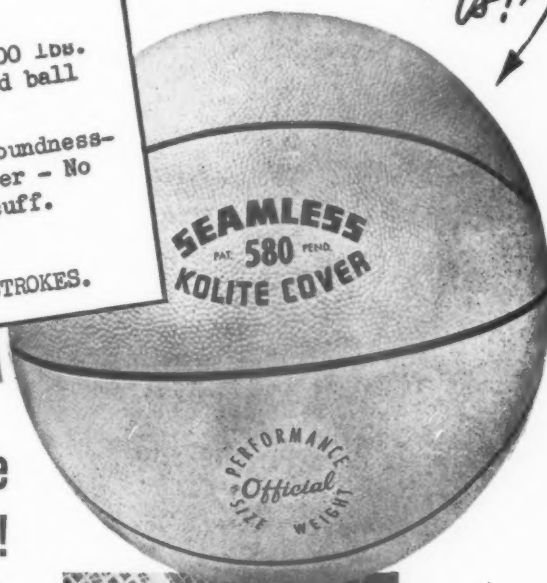
Here it is!

KOLITE 580 BASKETBALL TEST

Ball withstood 1,013,200 strokes of 500 lbs. pressure each. Each stroke compressed ball 1/3 its diameter.

Test Findings: Air Loss - 7/8 lb. Roundness - 1/8" out of round. Condition of Cover - No fractures, no ruptures. Hardly a scuff. General Condition - 100% playable.

U.S. GOVT. STANDARD TEST - 10,000 STROKES.



Seamless 580 Basketball Playable After 1,013,200 Quarter-Ton Blows!

"Unbelievable!"... "Sensational performance"... "A real tough ball!" That's what they're saying about the Seamless 580 Basketball after its record-busting tussle with the U.S. Government Official Shaper Tester.

On courts across the nation, coaches, officials and players are acclaiming the straight shooting, sure dribbling Seamless 580 Basketball for its all-around balanced playability. Here are the outside and under-the-cover reasons why:

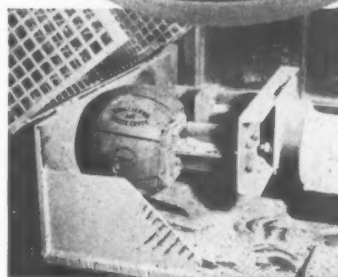
KOLITE COVER —Tougher than ordinary rubber. 100% waterproof—scuff-proof. Looks and feels like fine leather, yet more durable.

SPECIALLY PROCESSED NYLON WINDING —Multiple layers mean ball has greater life, WILL NOT TEAR, stands toughest treatment.

BUTYL BLADDER —The amazing synthetic rubber that practically eliminates need for reinflation.

KANTLEEK VALVE —All-rubber Patented Kantleek Valve is molded into bladder—cannot separate—air cannot escape.

Please order now! Never before was such a ball offered, AT ANY PRICE!



This is the U.S. Government Shaper Tester that subjected the Seamless 580 Basketball to the equivalent of 22 years of play.

The Seamless 581 Football and 588 Soccer Ball incorporate the same rugged construction features found in the Seamless 580 Basketball.



SANCTIONED BY
N.F.H.S.A.A.

ATHLETIC GOODS DIVISION

THE SEAMLESS RUBBER COMPANY

NEW HAVEN 3, CONN., U. S. A.





GOOD MORNING — COACH!

About a month or so ago we ordered 15 new Ford Tudors. Eight of them have already been delivered — in place of the ones turned in. The others will be available this fall — which will give us a fleet of 40 cars for about September 1.

In the meantime, we have enough autos and factory-trained salesmen to bring expert

reconditioning service to the doors of thousands of schools and colleges throughout the land.

If our men don't get to see you — they can only work 24 hours a day — send your stuff along yourself, and we in the IVORY SYSTEM will get it done for you when you need it.

The Ivory System is in a Class by Itself!



PEABODY, MASSACHUSETTS



RECONDITIONERS OF
ATHLETIC EQUIPMENT

